

JPRS-TND-91-012
8 AUGUST 1991



JPRS Report

Proliferation Issues

PROLIFERATION ISSUES

JPRS-TND-91-012

CONTENTS

8 August 1991

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

AFRICA

SOUTH AFRICA

Civilian Uses for Nuclear Fuel Sought [THE WEEKLY MAIL 5-11 Jul]	1
--	---

CHINA

Premier Li Briefs Press on Arms [XINHUA]	2
Diplomat Rebutts 'Lies' on Missile Deliveries [XINHUA]	2
Government Rebutts Mideast Missile Shipments [Beijing International]	2
First Pulsed Reactor Begins Operation in Sichuan [ZHONGGUO TONGXUN SHE]	2
Construction of Fourth Nuclear Plant Undecided	3
Premier Hao Calls 'Must' [CNA]	3
EPA Favors Postponement [Taipei Radio]	3
Daya Bay Test of Hong Kong Accident Response Fails [Hong Kong SOUTH CHINA MORNING POST 17 Jun]	3

EAST ASIA

SOUTH KOREA

Removal of Tactical Nuclear Weapons Debated	5
U.S. Concerns With Japan [CHUNGANG ILBO 4 May]	5
USFK Nuclear Weapons Withdrawal Discussed [HANGUK ILBO 3 May]	7
Contract Signed To Build Nuclear Power Reactors [YONHAP]	8

EAST EUROPE

BULGARIA

Ministry Defends Purchase of SS-23 Missiles [BTA]	9
---	---

CZECHOSLOVAKIA

Defense Ministry Denies Selling Rockets to Slovenia [CTK]	9
General Claims SS-23's Not Covered by Treaty [CTK]	9

YUGOSLAVIA

FRG, CSFR, Austria Implicated in Arms Exports [Belgrade TV]	9
---	---

LATIN AMERICA

ARGENTINA

Former Official Denies Alleged Purchase of Nuclear Weapons [NOTICIAS ARGENTINAS]	11
--	----

BRAZIL

IAEA To Oversee Nuclear Agreement With Argentina [O GLOBO 7 Jul]	11
President Collor Signed Nuclear Accord [Brasilia TV]	11

Progress of Safeguards Accord With Argentina [O GLOBO 7 Jul]	12
Phases of Timetable Viewed	12
Passport to World Market	12
Argentina, Brazil Sign Nuclear Treaty	13
Complements Previous Agreement [Buenos Aires NOTICIAS ARGENTINAS]	13
Pledges No Further Production [Mexico City TV]	13
Paper Reviews Nuclear Programs [MANCHETE 8 Jun]	13

NEAR EAST & SOUTH ASIA

EGYPT

Iraqi Nuclear Equipment Said Sent to Algeria [AL-AHRAR 22 Jul]	16
--	----

INDIA

Bush Proposal on Proliferation in Asia Discussed [THE HINDU 13 Jun]	16
Pakistan Nonproliferation Proposal Rejected [THE HINDU 8 Jun]	18
Successful Test of Prithvi Missile Hailed [Delhi International]	18

IRAN

PRC To Supply Nuclear Technology [London SAWT AL-KUWAYT AL-DUWALI 11 Jul]	19
---	----

PAKISTAN

U.S. Asked To Be 'Consistent' on Nuclear Issue [DAWN 16 Jul]	20
Sajjad: Nuclear Proposal Not for U.S. Aid [Islamabad Radio]	20
Paper Sees Nuclear Freeze in South Asia Beneficial [THE FRONTIER POST 23, 24 May]	21
Afghan Fires Scud Missile [Islamabad Radio]	25

SUDAN

Minister Denies Iraqis Storing Nuclear Material [Cairo MENA]	25
--	----

SOVIET UNION

12 Nuclear Missiles Removed From Germany [Berlin ADN]	26
Urges DPRK To Sign Nuclear Accord [Seoul YONHAP]	26
G-7 Declaration on Nonproliferation [TASS]	26
Foreign Ministry Officials Deny Sale of Uranium [INTERFAX]	26

WEST EUROPE

AUSTRIA

Charges of Missile Delivery to SFRY Denied [Belgrade TANJUG]	28
--	----

FRANCE

Cooperation With UK To Reprocess Iraqi Uranium [LE MONDE 18 Jul]	28
Arms Industry Seen To Benefit From Gulf War [LE MONDE 3 Jul]	28

GERMANY

Soviet SS-23 Missiles To Be Destroyed [Cologne Radio]	29
Problems Noted in Destruction of SS-23 Missiles [DPA]	29
Arms Trade, Chemical Plant Sales to Iran Noted [DER SPIEGEL 15 Jul]	29
Arms Export Controls Seen Ineffective [WIRTSCHAFTSWOCHE 31 May]	31

SWEDEN

Proposal To Ban Nuclear Power Investments Criticized [*DAGENS NYHETER 4 Jul*] 35

INTERNATIONAL

Weapons Check Law [*Hong Kong THE HONG KONG STANDARD 25 May*] 37

SOUTH AFRICA

Civilian Uses for Nuclear Fuel Sought

91AF1296Z Johannesburg THE WEEKLY MAIL
in English 5-11 Jul 91 p 8

[Article by Eddie Koch: "Nuclear-Treaty Somersault Fuels Power Plan"; first paragraph is THE WEEKLY MAIL introduction]

[Excerpts] Behind Pretoria's willingness to curb its nuclear-weapons industry is an aggressive plan to market nuclear fuel for civilian purposes.

South Africa's new-found willingness to sign the Non-Proliferation of Nuclear Weapons Treaty (NPT) will help curb Pretoria's nuclear-weapons industry, but signals an aggressive government plan to market locally made nuclear fuel for civilian power stations on international markets.

President F. W. de Klerk's about-turn on the NPT last week—when he said South Africa was willing to sign it after years of resisting international pressure to do so—was designed to boost the country's ability to sell fuel rods for civilian nuclear-power stations, says Earth-life Africa nuclear expert Mike Kantey.

"The treaty prohibits trade in nuclear weapons and allows non-civilian nuclear installations to be monitored by officials of the NPT," says Kantey. "But it does not affect the civilian programme, and South Africa's signing will certainly help it to sell nuclear fuel on world markets."

De Klerk's announcement follows an official Atomic Energy Corporation (AEC) report late last year that it was seriously investigating the possibility of exporting nuclear fuel from its processing plant at Valindaba, where fuel rods for use at the Koeberg nuclear-power station near Cape Town are manufactured.

AEC chief executive Waldo Stumpf said then that although there was a downturn in international sales of enriched uranium, prospects for export were expected to increase from the second half of 1990, when nuclear-power generation was expected to increase around the world.

The AEC's news followed a report from the state-run corporation stating that it was capable of meeting all demand from Koeberg for fuel rods.

Until last year South Africa had relied on imported uranium fuel to power Koeberg's twin reactors—and the change-over reflected AEC's intention to enter the international nuclear market as an aggressive seller rather than purchaser.

"AEC invested more than R[ands]500-million to build its fuel-fabrication plant at Valindaba (near Pretoria) and the capital cost of the plant must have increased dramatically in the past decade," says Kantey.

"Ways have to be found for this to be paid back. There is a glut of uranium on world markets and a downturn in international sales of uranium since Chernobyl and the end of the Cold War. So AEC is in a pickle. It needs a marketing campaign—and that is what the signing of the NPT is about."

Energy specialist Marc Gandar told THE WEEKLY MAIL that AEC's stepped-up production of nuclear fuel indicates the government has committed itself to a full-blown nuclear programme for civilian purposes, and the environmental hazards that go with it. [passage omitted]

Foreign Minister Pik Botha denied the government's somersault on the NPT was motivated by a desire to accelerate the lifting of sanctions. He reiterated De Klerk's claim that the cabinet had decided to sign the NPT because the world order and the military situation in southern Africa had improved.

De Klerk and Botha said Pretoria agreed with the Organisation of African Unity's principle that the continent become a nuclear-free zone. Negotiations had already taken place with several Frontline states to create a nuclear-free zone in southern Africa, Botha added.

When Pretoria signs the NPT, it will have to open all aspects of its nuclear programme to inspection by members of the United Nations' international Atomic Energy Agency—including its uranium-enrichment facilities and fuel-fabrication plants at Valindaba and Pelindaba.

Kantey says the treaty will inhibit the ability to use enriched uranium developed at Valindaba or plutonium generated at Koeberg—both the vital elements of nuclear bombs—for military purposes.

"The treaty will impose an audit that will make it difficult to divert these fuels. But it's a very leaky treaty and will by no means guarantee nuclear weapons won't be made here."

"Recent experience in Iraq after the Gulf War has highlighted how easy it is to hide nuclear facilities for military use from monitoring officials."

Premier Li Briefs Press on Arms

OW1307195791 Beijing XINHUA in English
1941 GMT 13 Jul 91

[Text] Damascus, July 13 (XINHUA)—Visiting Chinese Premier Li Peng today reiterated the three-point principle China observes regarding arms sales to other countries.

The premier said the principle includes the following points:

- China only provides defensive weapons that can help protect the security of the buying country;
- China is very prudent on the issue of arms sales; and
- China does not attach any political conditions to its arms sales, which are very limited.

The Chinese premier was speaking at a press conference on the third day of his four-day official goodwill visit to Syria.

This principle, the premier added, is intended to contribute to the safeguarding, instead of upsetting, regional peace and stability.

Diplomat Rebuts 'Lies' on Missile Deliveries

OW1607063391 Beijing XINHUA Domestic Service
in Chinese 0427 GMT 16 Jul 91

["Chinese Embassy in the United States Refutes Lies Spread by a U.S. Newspaper; by reporter Wei Guoqiang (7614 0948 1730)"—XINHUA headline]

[Text] Washington, 15 July (XINHUA)—Chen Guoqing, press counsellor at the Chinese Embassy in the United States, submitted an open letter to the editors of THE WASHINGTON TIMES on 15 July, refuting a "news report" carried by the newspaper not long ago on China's secret delivery of guided missiles to the Middle East via Cyprus.

Chen Guoqing pointed out in his letter: "The accusation is sheer nonsense. Because it gives the appearance of having some grounds, it might confuse and mislead the U.S. public."

He said: The Chinese Government has always adopted a serious, prudent, and responsible attitude toward the issue of arms exports and strictly abides by the following three principles. First, arms exports must help countries concerned to safeguard their independence, sovereignty, and territorial integrity and in maintaining necessary and reasonable defense capabilities. Second, arms exports must be conducive to maintaining peace, security, and stability in relevant regions. Third, China does not use arms exports as a means of interfering in the internal affairs of other countries.

He said: "Based on these principles, China has provided Pakistan with limited quantities of conventional weapons, including very small quantities of short-range tactical missiles. This has not constituted any threat to a

third country. Contrary to the situation reported extensively by U.S. mass media, China has not provided missiles to Syria."

He said: The realization of peace and stability in the Middle East requires the joint efforts of the countries in the Middle East and other regions. Because of this, "those countries that have exported large quantities of weapons to that region should take the lead in adopting a responsible attitude and earnestly exercise self-restraint."

Government Rebuts Mideast Missile Shipments

OW1607131691 Beijing Radio Beijing in Mandarin to Asia 0900 GMT 16 Jul 91

[Text] Chen Guoqing, press counsellor at the Chinese Embassy in the United States, said in a letter to THE WASHINGTON TIMES that the newspaper's 2 July report alleging that China secretly shipped guided missiles to the Middle East via Cyprus was sheer nonsense.

In his open letter carried in the newspaper on 15 July, Chen Guoqing pointed out: The Chinese Government has always adopted a serious, prudent, and responsible attitude toward the issue of arms exports and strictly abides by the following three basic principles. First, arms exports must help countries concerned to safeguard their independence, sovereignty, and territorial integrity and in maintaining necessary and reasonable defense capabilities. Second, arms exports must be conducive to maintaining and enhancing peace, security, and stability in relevant regions. Third, arms exports must not be used as a means of interfering in the internal affairs of other countries.

Chen Guoqing emphatically pointed out: China advocates the total ban and destruction of nuclear, chemical, and biological weapons that can kill and wound people on a large scale. In addition, China also strives to make the Middle East a region free of nuclear weapons and other antipersonnel weapons of extensive destruction.

In conclusion, Chen Guoqing said: The realization of peace and stability in the Middle East requires the joint efforts of the countries in the Middle East and other regions. To achieve this goal, those countries that have exported large quantities of weapons to the region should take the lead in adopting a responsible attitude and earnestly exercise self-restraint.

First Pulsed Reactor Begins Operation in Sichuan

HK1007152691 Hong Kong ZHONGGUO TONGXUN
SHE in English 1240 GMT 10 Jul 91

["Starting Up of First Pulsed Reactor in Mainland Ends U.S. Monopoly of Reactor Technology"—ZHONGGUO TONGXUN SHE headline]

[Text] Beijing, July 10 (HKCNA)—The first pulsed reactor in the Mainland has gone into operation in Sichuan Province, according to the China Nuclear Power

Research and Design Institute, making China the second country in the world with the design and building technology to make such a reactor and ending the United States' monopoly of such technology.

After more than ten years' efforts, the institute was able to produce without outside assistance all the equipment and instruments to build a pulsed reactor. An appraisal of the equipment for environmental safety, its reliability and its operation showed good results and comparable efficiency with advanced international designs elsewhere. The reactor will serve to fill a gap in the field of nuclear technology in the Mainland.

The pulsed reactor uses special elements of nuclear fuel enabling the power produced to rapidly drop to a safely balanced state without the need of a protection system or adjustments being made by regulating staff even in the event of a sharp rise in the power being produced. The system is seen as an effective method of self-regulation.

The appraisal showed that the reactor has, under normal conditions, environmental radiation of only a few thousandths of units of the standard level permitted by the state. Such a reactor can be widely used by hospitals and higher learning institutes and can play an important role in the fields of industry, agriculture, scientific research, health, medicine and national defence.

Construction of Fourth Nuclear Plant Undecided

Premier Hao Calls 'Must'

OW1707121491 Taipei CNA in English 0830 GMT
17 Jul 91

[Text] Taipei, July 17 (CNA)—Building a fourth nuclear plant is a must for Taiwan's future development, Premier Hao Po-tsun told an environmental seminar here Tuesday.

Hao said Taiwan lacks the energy resources that are crucial to the nation's future development, it will be necessary to develop nuclear energy and construct the fourth nuclear plant.

The director-general of the Environment Protection Administration (EPA) Chao Shaw-kang had earlier suggested that, instead of building a new nuclear plant, the generators at existing nuclear plants be expanded to meet growing energy needs.

EPA Deputy Director General Frank Li told the seminar that the construction of the fourth nuclear plant is a part of the 1991-1996 national development plan.

Li said that the first and second generators at the fourth nuclear plant will cost 122.99 billion NT dollars during the six-year period.

He said safety measures at the nation's first three nuclear plants will be reviewed during the 1991-1996 period.

EPA Favors Postponement

OW1207084091 Taipei China Broadcasting
Corporation News Network in Mandarin 2300 GMT
8 Jul 91

[Text] Chao Shao-kang, chairman of the Environmental Protection Administration (EPA) under the Executive Yuan, voiced his position yesterday on the construction of the fourth nuclear power plant for the first time since he took office.

He pointed out: The Taiwan Power Company should add new generating units to the existing nuclear power plants and postpone the construction of the fourth one. The site of the proposed fourth nuclear power plant can either be used to build a natural gas-fueled thermal power plant or simply be put on hold. He asked that his comments be included in the assessment report on the construction of the fourth nuclear power plant, and that facts be presented to the Executive Yuan during its session.

He said that many people had accused him of being antinuclear. In fact, he has never made any antinuclear comments. It is also a fact, however, that he does not like nuclear power plants very much. During his time with the Legislative Yuan, he had made inquiries on the construction of the fourth nuclear power plant and asked for alternative plans. The position he had then still stands.

Daya Bay Test of Hong Kong Accident Response Fails

WA0729100091 Hong Kong SOUTH CHINA
MORNING POST in English 17 Jun 91 p 1

[Article by Jacqueline Lee]

[Text] A simulated emergency to test Hong Kong's response to an accident at the Daya Bay nuclear power station showed that the territory would have difficulty coping because of a shortage of trained staff and inadequate resources.

The Royal Observatory has stepped up its training programme following the two-day trial of the Government's draft contingency plan, on which Hong Kong will rely when the power station comes on stream next year.

More staff are to be sent on training courses and more practical exercises are planned to prepare staff to handle any radioactive fallout from Guangdong, the observatory's assistant director, Mr. Lam Hung-kwan, said.

The Royal Observatory, at the forefront of the contingency plan which involves 22 government departments, monitors radioactivity levels through an "early alerting network" of 10 stations around Kowloon and the north-east New Territories.

The trial, in December, found that the observatory needed to double its radiation expert team.

Staff were given advance warning that there was to be a test but were not told the time or date.

They were suddenly handed a set of data which indicated some kind of accident at Daya Bay.

Staff at the Royal Observatory then worked a straight 48 hours to test their ability to cope with a prolonged emergency. The 10-member team could barely cope with the work load and it is feared that members could crack under pressure during a real emergency that would probably extend to five or six days.

"Feedback from our staff also indicates that more practical exercises are needed, on top of classroom work," Mr. Lam said.

"Measures are being taken to ensure that enough trained staff will be available by the time Daya Bay comes on stream in the middle of next year," he said.

Once contamination is detected by the monitoring stations, data will be dispatched to headquarters, where the special team will analyze the information.

Officers of the Department of Health will assist in assessing the risk to the public.

The Secretary for Security will be informed if counter-measures are needed.

The draft plan is now under revision by government officials in consultation with experts from the International Atomic Energy Agency.

A government spokesman said: "The exercise was very useful and showed that the Hong Kong contingency plan is sound although it needs fine-tuning.

"We aim to make sure the contingency plan is up to the highest international standards however unlikely an incident at Daya Bay is."

The spokesman said the contingency plan would be in place before the commissioning of the plant next year, but he was unable to say whether there would be a trial run of the revised plan.

"These kinds of plans are always under review. It is too early to say," he said.

SOUTH KOREA

Removal of Tactical Nuclear Weapons Debated

U.S. Concerns With Japan

912C0228A Seoul CHUNGANG ILBO in Korean
4 May 91 p 5

[Article by Mun Chang-kuk and Pa a-chol: "Extraordinary U.S., Japanese Concerns Over the Nuclear Weapons on the Korean Peninsula"]

[Text] Editor's note: Controversies over the nuclear weapons on the Korean peninsula have markedly intensified lately as arguments about the North Korean nuclear weapons development program have expanded to involve the nuclear weapons of the U.S. Forces in Korea [USFK], making it an issue. While the U.S. Government and public are showing extraordinary concern about this issue, Japanese and French newspapers reported that U.S. and Soviet authorities are conducting secret negotiations on removing the U.S. nuclear arms from Korea to get North Korea to halt its own nuclear weapons development. The following are reports on Washington's position and Tokyo's view on the issue of nuclear weapons on the Korean peninsula. [end editor's note])

A media debate is under way on withdrawing the USFK tactical nuclear weapons as a means of preventing North Korea from developing its own nuclear weapons. The debate is drawing public attention.

After the Japanese newspaper NIHON KEIZAI SHIMBUN reported that the United States and the Soviet Union have been conducting secret negotiations on the withdrawal of the USFK nuclear weapons since last year, the French paper LE MONDE reported that the United States is considering removing its nuclear arms from Korea on the condition of a nuclear-free Korean peninsula.

Concerning the North Korean nuclear weapons development program, Washington has so far been leading an international effort to put pressure on North Korea under the policy of resolving the issue diplomatically.

However, in the wake of the Gulf war, while the diplomatic effort failed to produce results, the Korean peninsula was highlighted as a region with the greatest danger of conflict and, as a result, the North Korean nuclear weapons program began drawing more and more international attention.

Analyses available indicate that the lesson of the Gulf War made North Korea skeptical about the effectiveness of its military forces armed with Soviet weapons, and that as a result, North Korea now clings to its nuclear weapons development program even more persistently. Some insist that the North Korean nuclear weapons program not only poses a direct threat to the ROK but

also is likely to neutralize the effect of the USFK tactical nuclear weapons as a war deterrent.

They are concerned that this will increase the possibility of Japan and the ROK—currently under the U.S. nuclear umbrella—beginning their own nuclear weapons programs in haste, compelling Washington to fundamentally alter its whole concept about Northeast Asian security.

Furthermore, as ROK National Defense Minister Yi Chong-ku said, it could also create a situation in which a surprise attack on the North Korean nuclear facilities by the ROK military forces cannot be ruled out. If things should develop that way, the Korean peninsula could be drawn into the vortex of war.

After all, the best thing is to get North Korea to halt its nuclear weapons program. It refuses to cooperate, however, and therein lies the problem for the countries concerned.

The United States is trying to talk North Korea into cooperation, on the condition of improvement in the U.S. and Japanese relations with it. Even the Soviet Union came to its assistance but the U.S. effort has so far produced no specific results.

Therefore, U.S. academics and government institutes came forward with suggestions that accepting the North Korean demand and withdrawing the USFK tactical nuclear weapons from Korea could be a way to break the deadlock.

THE NEW YORK TIMES, in a 16 April editorial dealing with nuclear weapons on and in the vicinity of the Korean peninsula, wrote that a partial withdrawal of the USFK nuclear weapons could be a way to allay the North Korean misgivings. THE WALL STREET JOURNAL also carried an article suggesting removal of the U.S. ground forces' nuclear weapons from Korea.

Also, U.S. political leaders including Rep. Solarz, chairman of the House East Asia and Pacific Affairs Subcommittee, have long been suggesting denuclearization of the Korean peninsula.

Meanwhile, the U.S. Administration has not officially responded to this debate as yet.

Based on its policy of "neither confirming nor denying" as far as the presence of nuclear weapons is concerned, the United States keeps mum on whether or not the USFK have nuclear weapons.

It was confirmed indirectly, however, that Washington does not see the idea of denuclearization as convincing.

Also, some insist that when the Soviet Union and China adjacent to the Korean peninsula are armed with their nuclear weapons, it is meaningless to make the Korean peninsula alone nuclear-free.

Their position is that if a perfect denuclearization is to be attained on the Korean peninsula, the United States is required to withdraw all its nuclear arms from Northeast Asia. In that case, they emphasize, there will be no way to protect Japan against the Chinese and Soviet nuclear threat.

In fact, Japan itself adheres to its Three Non-Nuclear Principles of "not making, not possessing and not using nuclear weapons."

However, the United States, which defends Japan with its strategic nuclear weapons operated by the naval and air forces, finds it inevitable for that nuclear weapons strategy in the region to suffer a setback should the Korean peninsula be denuclearized.

Therefore, Washington holds on to the policy viewing the Korean peninsula denuclearization plan pushed by the Soviet Union and North Korea as unacceptable.

According to a different assessment, the United States cannot afford to completely rule out the possibility of considering a more limited question, namely, removal of the USFK tactical nuclear weapons, to get North Korea to halt its own nuclear weapons development program.

This assessment, discussed mostly in the United States, is based on a judgment that it could be possible to apply to the Korean peninsula the same nuclear weapons strategy relying on the naval and air forces that is currently applied to Japan, and that if so, the nuclear weapons currently assigned to the ground forces could possibly be removed.

However, in this case, too, there is a difficulty—that is, since the U.S. policy is not to acknowledge the existence of nuclear weapons, Washington cannot officially announce that it is removing the ground forces' nuclear arms; consequently, it is in no position to negotiate with North Korea on it.

In addition, there is no guarantee that North Korea will halt its nuclear weapons program.

Therefore, it is feared that the ROK and Japan will feel compelled to begin their own nuclear weapons programs, making nuclear proliferation in Northeast Asia inevitable.

In the absence of a reliable guarantee that North Korea will not develop its nuclear weapons, the United States finds it not an easy thing to withdraw its tactical nuclear weapons from the Korean peninsula.

Washington will likely continue to apply diplomatic pressure on North Korea for the time being under the policy of viewing the question of North Korea joining the international nuclear safety pact and the question of the USFK nuclear weapons as problems of entirely different dimensions and allowing no linkage between them.

Meanwhile, the Japanese Government and public are even more concerned about the North Korean nuclear weapons program than the ROK. While showing their profound apprehension, they are endeavoring to bring the North Korean program to a halt.

During his talks with President Gorbachev, who visited Japan last month, Prime Minister Toshiki Kaifu, explaining developments on the Korean peninsula, made references to the North Korean nuclear weapons program. Also, reflecting his positive stance on the issue, a Japan-USSR joint communique stated that the two countries "wish that North Korea would sign the international nuclear safety pact with the International Atomic Energy Agency (IAEA)."

Furthermore, Jushiro Komiyama, Lower House member who is currently visiting North Korea as the leader of the Japanese delegation to the IPU (Interparliamentary Union) session, met with Kim Il-song in the capacity of a senior delegate. At this meeting, Komiyama twice asked Kim "Don't you think North Korea should accept the IAEA nuclear inspection?" to embarrass the North Korean side.

Japan is extremely nervous about the suspicion that North Korea is developing its nuclear weapons. The reasons are: 1) It is the only country in the world that has experienced an atomic bombing; 2) if North Korea should develop its nuclear weapons, Japan would come within their range; 3) if there is any radioactive fallout from a North Korean nuclear accident, it could cause direct damage to Japan.

It is said that in fact, Japanese authorities have been aware since the mid-1980's of the possibility of North Korea having nuclear bombs by 1994-95.

However, it is known that Washington sent several defense intelligence and nuclear experts to Japan in the late October-early November period last year with more than 10 photographs from a U.S. military reconnaissance satellite proving that "the North Korean nuclear weapons development program has entered its final phase," and that Japanese Foreign Ministry and other officials have since been perceiving it as a "burning issue."

Japanese intelligence sources are also paying attention to the fact that North Koreans frequently make remarks admitting their nuclear weapons development program as a fact.

On 3 September last year, North Korean Foreign Minister Kim Yong-nam stated in a memorandum made public after his talks with former Soviet Foreign Minister Shevardnadze: "If the Soviet Union establishes diplomatic relations with South Korea, we will take measures to make on our own some of the weapons for which we have been depending on the alliance." Subsequently, a KOMSOMOLSKAYA PRAVDA correspondent in a dispatch from Pyongyang—carried in the Soviet newspaper

dated 29 November—reported that Kim Yong-nam had admitted that the “weapons to be made on our own” meant nuclear weapons.

Thus, as the possibility of North Korea having nuclear weapons emerged as a “real threat,” the Japanese Defense Agency, the Public Security Investigation Agency [PSIA] and other government organizations grew extremely sensitive to the ROK’s response as well as the North Korean move.

The PSIA in its 1991 “Report on the Domestic and International Situations” observed that North Korea will not easily agree to an IAEA inspection of its nuclear facilities because it intends to use the issue as “a trump card for negotiations with the United States.” A PSIA source noted that “the North Korean nuclear weapons development program is pushing the ROK into undertaking its nuclear weapons program.” He appeared to be more concerned about the possibility that the ROK, which prevails over North Korea in economic strength, can develop its nuclear weapons if it chooses to do so.

Japan is apprehensive that if this situation should result in a domino phenomenon and nuclear weapons development spreads throughout the Asia-Pacific region, the tension in the region will increase rapidly and, possibly turn it into a “post-Gulf War powder keg.”

In this connection, Japan pins its hopes on the “U.S.-USSR secret negotiations on removing the USFK nuclear weapons” as reported by NIHON KEIZAI SHIMBUN on 2 May, as a way to head off such a nuclear domino phenomenon.

However, the Soviet ability to persuade North Korea has a limitation because North Korea has been saying at every opportunity that “the nuclear inspection issue is a U.S.-North Korean issue”; in addition, North Korea has been using the “nuclear trump card” for negotiations on disarmament including withdrawal of the USFK from the Korean peninsula. Under these circumstances, some experts express skepticism over the effectiveness of the reported secret negotiations, noting that this is no time for the United States to be the first to propose the withdrawal of the USFK nuclear weapons.

Inasmuch as the United States, Japan, China and the Soviet Union all share the same concerns about the highly possible North Korean development of its nuclear weapons, seeing it as a threatening time bomb, there is every indication that Japan as a potential victim will grow increasingly more sensitive than us as time goes by. Consequently, the North Korean nuclear weapons program will very likely become a stumbling block with a potentially serious impact on Japan’s normalization talks with North Korea.

USFK Nuclear Weapons Withdrawal Discussed

912C0228B Seoul HANGUK ILBO in Korean 3 May 91
p 5

[Article by Pae Chong-kun: “Great Impact Upon the Peripheral Countries of the Korean Peninsula Possible”]

[Text] If it is true that the United States and the Soviet Union entered secret negotiations on the removal of the USFK [U.S. Forces Korea] nuclear weapons from Korea as reported by NIHON KEIZAI SHIMBUN on 2 May, it is clearly an “important development” with an immense impact on the overall situation surrounding the Korean peninsula.

The reason is that if the withdrawal of the USFK nuclear weapons should become a reality, it would inevitably have direct consequences to the North Korea-Japan normalization and North Korea-U.S. rapprochement moves as well as North-South Korea relations.

The U.S.-USSR discussion of the USFK nuclear weapons, as reported by the Japanese media, can be viewed as a strategic move responding to, and seeking to bring to a halt, the North Korean nuclear weapons development program.

The United States and its Western allies—which used halting Iraq’s nuclear weapons development as a major justification of the Gulf War—pointed their finger at North Korea as a potentially nuclear-capable country after the Gulf War and began putting diplomatic pressure on it to accept the IAEA inspection of its nuclear facilities.

Based on the common understanding that they do not want to see a new military conflict occur on the Korean peninsula, the Soviet Union and China, too, are against North Korea’s nuclear weapons development. The NIHON KEIZAI SHIMBUN report pointed out that behind the U.S.-USSR secret negotiations is the judgment that a nuclear-armed North Korea would make the Soviet Union and China lose their military influence on the Kim Il-song government, prompt the ROK to develop its nuclear weapons, and create a crisis situation on the Korean peninsula when Kim Il-song dies.

In this connection, China and the Soviet Union have been insisting that in order to prevent North Korea from developing its nuclear weapons, the USFK nuclear weapons must be removed simultaneously. Based on that argument, the Soviet Union proposed denuclearization of the Korean peninsula.

These proposals have found a favorable response in the United States. In February, the ROK-U.S. Relations Committee, comprising prominent scholars in the two countries (ROK cochairman: former ambassador to Washington Kim Kyong-won) made an unprecedented open proposal for removing the USFK nuclear weapons from Korea. THE NEW YORK TIMES also carried a substantively similar editorial.

Their position is that the ROK now has the defense capability to deter North Korean provocations even without the help of the nuclear umbrella, and that for preventing an isolated North Korea from creating increased tension on the Korean peninsula, too, the withdrawal of the USFK nuclear weapons is called for.

It is a fact that the USFK nuclear weapons are for a more symbolic than tactical purpose. It can be expected that their removal will first of all contribute positively to the domestic situation and North-South relations. The fact that the nuclear weapons that can bring a catastrophe to the Korean peninsula are being managed by the U.S. military has been a factor of the rising anti-U.S. sentiment in the ROK. North Korea has also been demanding the withdrawal of the USFK nuclear weapons as a major precondition for better North-South relations.

Therefore, if the United States removes the USFK nuclear weapons, it will in effect relieve the ROK Government of a heavy burden, namely, the obstacle impeding its free pursuit of policy in various fields.

Internationally, it will very likely create a new turning point for U.S.-North Korea relations. NIHON KEIZAI SHIMBUN foresees the possibility of the United States and North Korea entering direct negotiations by the good offices of the Soviet Union should the negotiations on the USFK nuclear weapons produce results.

North Korea has long held a strong desire for better relations with the United States. It has been in unofficial contact with U.S. officials in Beijing since last year. In these contacts, it strongly demanded that the U.S. side upgrade the contacts from the working level to an ambassadorial level.

Washington recently suspended these contacts, ostensibly for reasons relating to the North Korean nuclear weapons program. Therefore, it appears that North Korea will positively respond to proposals for bilateral talks on nuclear weapons and withdrawal of the USFK.

Furthermore, the withdrawal of the USFK nuclear weapons will probably work as a catalyst to powerfully accelerate the North Korea-Japan normalization talks which currently are facing hard sailing.

Japan has been procrastinating on the normalization talks as a result of the U.S. and ROK pressure for it to

withhold normalization until North Korea accepts obligation under the nuclear safety agreement.

In the final analysis, the possibility is great of all these developments leading up to a cross recognition of North and South Korea by the four big powers with interests on the Korean peninsula.

However, this possibility is only conceivable under the premise that the United States removes the USFK nuclear weapons and, at the same time, North Korea accepts obligation under the nuclear safety pact. The reason is that considering the current cooperative mood between the United States and the Soviet Union, it is doubtful whether Washington will get to deciding to withdraw all the USFK nuclear weapons, and that it is difficult to predict how North Korea—demanding not only the withdrawal of the nuclear weapons but assurances of nonuse on nuclear weapons as well—will respond.

Contract Signed To Build Nuclear Power Reactors

SK2307093791 Seoul YONHAP in English 0836 GMT 23 Jul 91

[Text] Seoul, July 23 (YONHAP)—The Korea Atomic Energy Research Institute (KAERI) has signed with Korea Heavy Industries and Construction Co. to design the nuclear steam supply system for the Uljin nuclear power reactors, no. 3 and no. 4, some 220 kilometers southeast of Seoul, a KAERI spokesman said Tuesday.

It marked the first time for Korean technicians to design the system without the help of foreign technology which is currently owned by a handful of science powers such as the United States, France, the Soviet Union, he said.

Korea had completely depended on foreign technology for designing the nuclear reactors until it designed reactors for Yongkwang no. 3 and no. 4 on the nation's west coast jointly with combustion engineering of the United States in 1989.

He said the Uljin project led by Korean technology became possible as the nuclear reactor industry turned into a buyer's market and Korea made strenuous efforts to introduce foreign technology in the past several years.

The Uljin power plants will be put into operation in June 1998 and June 1999, respectively.

BULGARIA

Ministry Defends Purchase of SS-23 Missiles

AU2507084691 Sofia BTA in English 0814 GMT
25 Jul 91

[Text] Sofia, July 25 (BTA)—Some U.S. sources reported yesterday that the USSR had sold Bulgaria seven SS-23 missiles in violation of the 1987 Moscow-Washington INF Treaty. In this connection, Lieutenant General Ivan Stefanov, spokesman for the Ministry of Defence, made the following statement on national television last night:

"The missiles were delivered under an intergovernmental agreement signed in 1986. The seven missiles and two launchers arrived in February 1987. Bulgaria has not bought any more missiles since December 8, 1987," General Stefanov said. Under the INF Treaty, only missiles owned by the two contracting parties or delivered after the signing of the treaty are subject to dismantling and control.

The SS-23 missiles in Bulgaria, armed with conventional warheads, are within the 400 km range and are manned by Bulgarian experts only. Still, they enhance Bulgaria's defence capability, General Stefanov said.

CZECHOSLOVAKIA

Defense Ministry Denies Selling Rockets to Slovenia

LD1707145191 Prague CTK in English 1325 GMT
17 Jul 91

[Text] Prague July 17 (CTK)—The Czechoslovak Omnipol corporation and the Defence Ministry have denied a report in today's issue of the Yugoslav newspaper "NARODNA ARMIJA" that Czechoslovak weapons were exported to the Yugoslav Republic of Slovenia last spring.

"NARODNA ARMIJA", the Yugoslav Defence Ministry paper, said representatives of the Slovene Government and the Czechoslovak Defence Ministry reached agreement on the delivery of SAM-7 anti-aircraft rocket systems in March. The report cited Omnipol as the intermediary and said Slovenia was also offered 40-barrel RM-70 minethrowers and AT-8 anti-tank munition.

Omnipol department head director Jiri Sir told CTK that the delivery to Slovenia never materialised. He said that exports of some weapons to Yugoslavia were discussed with an American intermediary at the time mentioned in the article but the operation failed because the American partner was unable to supply an "end user certificate".

Sir said this was to be either a Yugoslav Defence Ministry or a government statement that the arms were intended for the sole use of the Federal authorities.

The Czechoslovak Defence Ministry said it does not export weapons.

General Claims SS-23's Not Covered by Treaty

LD2707133891 Prague CTK in English 1022 GMT
27 Jul 91

[From the Press Review]

[Text] Prague July 27 (CTK)—the Czech daily "MLADA FRONTA DNES" today deals with the fact that the Czechoslovakia Army has twenty-four SS 23 Soviet-made medium-range missiles. It quotes General Karel Pezl, chief of staff of the Czechoslovakia Army, as saying that the missiles were supplied to Czechoslovakia several years before the United States and the Soviet Union signed the treaty on medium and short-range missiles, i.e. before summer 1987. Therefore, the treaty was not breached, Pezl added. He also said the Czechoslovak Army has never owned nuclear warheads for the missiles.

YUGOSLAVIA

FRG, CSFR, Austria Implicated in Arms Exports

AU2607202891 Belgrade RTV Sat TV
in Serbo-Croatian 1730 GMT 26 Jul 91

[Interview with NARODNA ARMIJA political-military commentator Milan Drecun by Dragan Milutinovic; place and date not given—live or recorded]

[Text] [Milutinovic] Exactly 6 months ago Yugoslavia was shaken by the Kalashnikov affair. However, the appetites of the leaders of the northwestern republics have increased. They are now importing tanks and helicopters like these. This was a reason to invite to our news program military-political commentator Milan Drecun.

Comrade Drecun, what is being imported and through what channels?

[Drecun] According to the latest information that I have, there are several combat helicopters and combat aircraft in Austria which Slovenes intend to bring to Slovenia as soon as Brnik Airport reopens. This is why they are exerting pressure on the Yugoslav People's Army to reopen this airport.

There is also some information that a Czech firm Omnibol, which is otherwise known for smuggling and selling weapons, is now intensively delivering arms of Soviet origin—arms that were left in the CSFR after the withdrawal of Soviet troops—to Croatia and Slovenia. The Czechs recently sold the missile system Arrow 2-M Sam 7. They also offered 40 barrel launchers known as Flame [Oganj] and AT 8 anti-tank missiles.

The Germans also sold the very deadly Armbrust anti-tank missiles. It is, however, interesting that during the

dirty war against the Yugoslav People's Army in Slovenia these missiles were even handled by German instructors, about a dozen of them assigned to train members of the Territorial Defense of Slovenia how to handle these missiles.

[Milutinovic] A base was recently destroyed with these anti-tank missiles.

[Drecun] Yes. For me it was interesting that these Armbrust missiles were at the base, which means that these missiles have also found their way to Croatia, something that could be bought in connection with the relationship of Germany to the northwest part of Yugoslavia.

[Milutinovic] In other words, Germany is not exactly selling these Armbrust missiles to everyone.

[Drecun] No. Special German units are armed with these Armbrust missiles and the Germans are obviously selling them according to their strategic and tactical plans.

One should also say that in addition to sending instructors to train the 27th elite brigade of the Territorial Defense of Slovenia, the Germans also sent a group of officers, that is, the officers of the Bundeswehr, who illegally stayed in Slovenia and carried out a complete inspection of weapons of this elite unit of the Slovene Territorial Defense.

[Milutinovic] Some Slovenes and Croats, deserting pilots, are also talking about the import of aircraft from Hungary.

[Drecun] Yes. Lieutenant Drago Brencic, who deserted from the Yugoslav People's Army, publicly stated in Vrhnika, Slovenia that some 30 deserting Slovene pilots are in Hungary. They intend to fly MiG aircraft, allegedly waiting in Hungary, to Slovenia.

ARGENTINA

Former Official Denies Alleged Purchase of Nuclear Weapons

PY2607185891 Buenos Aires NOTICIAS
ARGENTINAS in Spanish 1640 GMT 26 Jul 91

[Excerpt] Buenos Aires, 26 Jul (NA) — The international scandal that has been unleashed due to the liquidation of the Bank of Credit and Commerce International, which has been accused of being the agent of terrorists, drug traffickers, and spies, today involved Argentina because information received from abroad indicates that Generals Jorge Videla and Leopoldo Galtieri carried out negotiations with that bank to acquire nuclear weapons.

According to the London daily THE GUARDIAN, Galtieri and Videla had the "intention" of acquiring nuclear weapons, which was evidently not achieved. However, what the British newspaper does not say is that just before Argentina became democratic, researchers of the National Atomic Energy Commission were able to complete the uranium enriching process, which is the indispensable basis for manufacturing nuclear weapons.

This news agency's attempt to contact the military men, mentioned by the English newspaper, was not successful.

Moreover, a former official of the military government, who asked not to be identified, flatly denied the newspaper's assertion, and he maintained that at that time the intention was to develop the uranium enriching process and thus not "purchase" nuclear weapons.

Local intelligence organization sources have interpreted the assertion of the English newspaper as a "psychological operation" to highlight "the nuclear aspect of peripheral countries" to thus increase the controls exercised by members of the nuclear club over countries with atomic development. [passage omitted]

BRAZIL

IAEA To Oversee Nuclear Agreement With Argentina

PY1307004691 Rio de Janeiro O GLOBO in Portuguese
7 Jul 91 p 47

[Article by Cristiana Mendes Lobo]

[Text] Brasilia—Brazil and Argentina will sign a bilateral agreement on nuclear safeguards that will be overseen by the International Atomic Energy Agency (IAEA). The agreement will be submitted to the National Congress in August 1991, and, after approval, it will be signed by Presidents Fernando Collor de Mello and Carlos Menem at IAEA headquarters in Vienna, Austria, on 18 September. After signing the agreement, President Collor will leave for New York to deliver a speech at the UN General Assembly opening session.

The report was released by Strategic Affairs Secretary Pedro Paulo Leoni Ramos and Science and Technology Secretary Jose Goldemberg.

With this agreement, Brazil and Argentina will submit to specific IAEA controls. This does not mean, however, that Brazil will adhere to the nuclear Nonproliferation Treaty (NPT).

"The NPT is unacceptable," Leoni Ramos said.

According to him, the agreement on nuclear safeguards between Brazil and Argentina that will receive IAEA support has specific characteristics, and it is a continuation of the Foz do Iguacu Charter, signed by the presidents of the two countries in November 1990.

"The treaty between the two countries respects some logical IAEA requirements," Leoni Ramos said. According to him, it is an important step in this area and a natural result of the guidelines established by Brazil and Argentina.

"There is no change in direction. It is just a natural development," Leoni Ramos said, explaining the fact that the IAEA's approval of the treaty does not mean that Brazil agrees with the NPT.

"It is a tripartite agreement where Brazil and Argentina will receive the support of the top atomic energy organization, which is the IAEA," the secretary said.

Since 1988, Brazil and Argentina have been discussing oversight agreements in the nuclear sector. In November 1990, the two countries decided to create a Common System of Accounting and Control (SCCC) [Sistema Comum de Contabilidade e Controle] that provides for the exchange of information, confidential documents, and a list of nuclear materials in the two countries.

At the meeting between Presidents Fernando Collor and Carlos Menem, it was decided to open negotiations with the IAEA to sign a safeguard agreement.

President Collor Signed Nuclear Accord

PY1907162291 Brasilia Voz do Brasil Network
in Portuguese 2200 GMT 18 Jul 91

[Text] Presidents Fernando Collor of Brazil and Carlos Menem of Argentina today signed an agreement in Guadalajara, Mexico, defending the use of nuclear energy for exclusively peaceful purposes. The agreement was signed before 23 chiefs of state attending the first Ibero-American summit.

The document ratifies the commitments assumed last November by Presidents Collor and Menem in Foz do Iguazu, Brazil, and reasserts Brazilian obedience to the Constitution and the Tlatelolco Treaty, as well as President Collor's determination to make the Brazilian nuclear program as transparent as possible. In this agreement Brazil and Argentina agree to give up any explosive nuclear devices. The document also specifies that any

vehicle fueled by nuclear power, or its modification, represents a peaceful use; therefore, it is not included in the agreement. The document also establishes the creation of an Argentine-Brazilian agency to account for and control nuclear materials.

In his speech during the opening session of the Ibero-American summit in Guadalajara, President Collor said the agreement signed with Argentina represents a landmark in Argentine-Brazilian relations.

[Begin Collor recording] This agreement is very meaningful because it strengthens our peaceful objectives and establishes transparent procedures that demonstrate our commitment to peace before the international community. It also represents a new stage in the integration process we have begun and it gives way to even more promising perspectives for mutual cooperation in mastering new technologies. [end recording]

President Collor said the agreement will be a meaningful contribution to the consolidation of regional peace and security.

[Begin Collor recording] We are both committed to contributing to the concretion of the ideals of freedom and democracy, which today, more than ever, are associated with universal peace. This objective requires a more equitable distribution of the benefits of scientific, technological, and industrial progress. This is why the different parts of this agreement are important for attaining our objectives of better technological training. [end recording]

President Collor added that Brazil and Argentina cannot accept discrimination in access to advanced technological knowledge and goods. According to Collor, Brazil and Argentina are determined to contribute to attaining far-reaching, balanced solutions that will guarantee access to new technologies.

Progress of Safeguards Accord With Argentina

Phases of Timetable Viewed

91WD0117A Rio de Janeiro O GLOBO in Portuguese 7 Jul 91 p 47

[Article by correspondent Jose Negreiros]

[Text] Buenos Aires—The bilateral agreement to be signed by Brazil and Argentina, creating a system for monitoring nuclear materials and including a renunciation of production of atomic weapons—and, ultimately, a set of international safeguards with the IAEA [International Atomic Energy Authority] will be implemented by creating a bilateral organization: the Latin American Atomic Energy Agency (Latintón), which will function in a manner similar to Euratom, which unites countries of Western Europe.

This mechanism is designed to allow the countries to regulate themselves and it is through them that the

International Atomic Energy Association will exercise its monitoring function. That means that the IAEA inspectors will only not have access to the technological and industrial secrets of the two South American countries.

But, according to understandings reached with IAEA Director Hans Blix, Brazil and Argentina are willing to open up their nuclear programs completely, even the Brazilian programs known as "parallel," developed by the Armed Forces.

After the "auditing contract" has been signed with the IAEA, the two partners will begin the third phase of this timetable for legalizing their atomic development: signing of the Treaty of Tlatelolco, which bans nuclear weapons in Latin America.

That treaty was signed only conditionally by Brazil—it has not yet been ratified, since that country questions the fact that France and Great Britain, which are nuclear powers, have territorial possessions in South America (French Guiana, and the Falklands-Malvinas). Argentina simply never adhered to the treaty.

Once the circle of commitments undertaken with the authorities that supervise atomic activities at the international level has been closed, the two countries will be bound by a mechanism almost as comprehensive as the Treaty on the Nonproliferation of Nuclear Weapons, about which both Brazil and Argentina have always had reservations because of its discrimination against nations that do not belong to the "original atom club."

Passport to World Market

91WD0117B Rio de Janeiro O GLOBO in Portuguese 7 Jul 91 p 47

[Text] Buenos Aires (from our correspondent)—The effect of the accords to be signed by Brazil and Argentina submitting their joint nuclear development to the inspection by the IAEA [International Atomic Energy Authority] will be to give them a sort of a passport to the world market for atomic products, the gateway to which has so far been blocked by the industrialized world.

Direct pressure brought to bear by the United States against the Collor and Menem governments conditions a more favorable approach to negotiations on the external debt and better access to the latest technology (such as supercomputers) on submission of their countries' nuclear programs to the IAEA inspectors.

Furthermore, both Brazil and Argentina are increasingly involved in sales of nuclear materials, including joint transactions such as supplying semi-processed uranium to Siemens, of Germany, or selling portable mini-reactors to other developing countries.

Those deals will only materialize if both countries sign an agreement to safeguard their atomic materials and formally giving up the possibility of using them for nonpeaceful purposes. It is a legal act that will serve as a sort of "occupancy permit" for the Southern Cone's

fledgling atomic industry. Brazil already has a provision of this type in its Constitution, but it does not provide international guarantees. Besides, the country is developing a nuclear submarine.

"Unfortunately, our countries are economically very vulnerable and were forced to give in," an Argentine nuclear engineer said. He said that the "Latin mini-TNP" [Nuclear Nonproliferation Treaty] is a product of the unquestionable American hegemony in the wake of the Gulf War but, if the promises of the First World are to be believed, it may at least give Brazil and Argentina access to concrete offers of technological development. Canada, for example, is supposed to have agreed to conclude agreements in that regard as soon as the IAEA text is released.

Argentina, Brazil Sign Nuclear Treaty

Complements Previous Agreement

PY1807165091 Buenos Aires NOTICIAS
ARGENTINAS in Spanish 1411 GMT 18 Jul 91

[Text] Guadalajara, Mexico, 18 Jul (NA)—This morning in Guadalajara, Argentina and Brazil signed a new treaty promising "to use the nuclear material and installations under their jurisdiction and control exclusively for peaceful means."

The treaty, which complements the agreement signed by the two countries in Foz de Iguacu last year, was labeled by Argentine President Carlos Menem last night as "an example for all humanity."

"From this point on, nuclear development (in the two countries) will be for peace and never for death" said Menem at the Camino Real Hotel, where he is staying.

The agreement was signed at the Guadalajara Chamber of Commerce this morning by Menem and Brazilian President Fernando Collor. Foreign Ministers Guido di Tella and Francisco Rezek were also present.

Menem praised the agreement last night. He said: "This is a real example for all humanity because two countries, Brazil and Argentina, are signing a treaty that definitely puts an end to the possibility of manufacturing nuclear weapons in the region."

President Menem pointed out that with this step, Argentina and Brazil are in a position to sign the Tlatelolco Nuclear Nonproliferation Treaty. Menem said: "It is quite possible that Argentina and Brazil will end up signing that treaty."

The agreement signed this morning states that the two countries—after confirming their peaceful objectives—promised to prohibit and prevent the use, fabrication, production, or purchase through any means of any nuclear weapon in their respective territories. They also promised to refrain from fomenting; authorizing, directly or indirectly; or participating in the use, fabrication, production, or purchase of any nuclear weapon.

They also promised not to receive, store, produce, purchase, or install any part of a nuclear weapon.

The agreement also says: "In view of the fact that there is currently no technical distinction possible between nuclear explosive devices for peaceful uses or for military uses, the two countries also agreed to prohibit and prevent in their respective territories" any direct or indirect action for the production or purchase of any nuclear explosive devices.

The document also says that the agreement will not affect the two countries' inalienable rights to carry out research and production for the peaceful use of nuclear energy.

The agreement includes creation of the Argentine-Brazilian Agency for the Accounting and Control of Nuclear Materials [Agencia Brasileno-Argentina de Contabilidad y Control de Materiales Nucleares—ABACC].

Before the treaty signing, President Menem held several meetings in his suite in the Camino Real Hotel. As part of his activities, he met with members of Mercosur [Common Market of the South] (Argentina, Brazil, Paraguay, and Uruguay) to study the possibility of allowing Bolivia and Chile to join this organization.

Regarding Chile, Menem said last night that Mercosur "encourages the presence of all countries of the region." He added: "We are talking with Chile and the other countries; in the case of Chile it is not up to us, it is up to Chile" to join.

Pledges No Further Production

PA1807202391 Mexico City XEW Television Network
in Spanish 1803 GMT 18 Jul 91

[Excerpt] Within the framework of the activities of the first summit of presidents and heads of state of Ibero-America taking place in the Mexican city of Guadalajara, the Argentine and Brazilian Governments abandoned any intention of manufacturing an atomic bomb. In an agreement signed today, Argentine President Carlos Saul Menem and Brazilian President Fernando Collor pledged not to produce any type of nuclear weapon, not to deploy nuclear weapons in their territory, and not allow third countries to carry out nuclear testing in their territory. The document ratifies the right of both countries to continue scientific research for the peaceful use of nuclear power. It is worth noting that Brazil and Argentina are the only two Latin American countries that have the actual capability of manufacturing nuclear weapons. [passage omitted]

Paper Reviews Nuclear Programs

91WP0111A Rio de Janeiro MANCHETE
in Portuguese 8 Jun 91 pp 90-95

[Article by Helio Contreiras]

[Excerpt] They claim that "glasnost" has arrived in Brazil. Previously kept under lock and key, because of

the fear of outside pressure, Brazil's atomic (treasure) map has come to light, and MANCHETE is disclosing it exclusively. This "transparency" makes it possible to state that the country has at least 300,000 tons of uranium (discounting many unmeasured reserves in the Amazon region). It has mastered the technology of uranium enrichment through ultracentrifugation: a privilege of but few nations in the world. It produces radioisotopes for application in medicine, and has leading institutions specializing in the training of human resources. The greatest participation in all this is from the scientific community in Sao Paulo and the Navy, because the atomic submarine is coming from there.

According to the executive director of the National Commission for Nuclear Energy (CNEN), Professor Ancelmo Paschoa, the disclosure of an atomic map, with exact information, is a significant fact, indicating a highly relevant reality: The control of the nuclear field inspired by "national security" has collapsed.

In Sao Paulo, the Brazilian scientific community has one of its institutions with the greatest international credibility: the Institute for Nuclear and Energy Research [IPEN]. It was with support from IPEN technicians that the Aramar Experimental Center became viable, through investments in research. The CNEN, seeking mastery of the uranium enrichment technology through an economically viable method, and the Navy, not losing sight of a strategic objective, the nuclear submarine, pooled efforts.

The Aramar Center has been built in the locality of Ipero, nearly 20 km from the center of the municipality of Sorocaba. However, nuclear research is also being conducted in the state of Sao Paulo at the Aerospace Technology Center [CTA] (on laser application), in the municipality of Sao Jose dos Campos; and at the Agricultural Nuclear Engineering Center [CENA], in the town of Piracicaba. Sao Paulo made possible a significant development in research and projects, such as that at Ipero, with a view toward its industrial progress. For example, there is already a project at Ipero for the creation of a scientific and technological enclave there. In Rio there are three nuclear units with specific projects: the Nuclear Engineering Institute [IEN], on the island of Fundao; the Institute of Radio-Protection and Dosimetry [IRD], at Barra da Tijuca; and the Army's Special Projects Institute (IPE), in Guaratiba.

Located in Pocos de Caldas, Minas Gerais, is the processing plant that converts uranium ore into yellow cake; a treatment that allows for its conversion into fuel during a subsequent phase.

Nature distributed uranium in southern Brazil as well. Figueiras, in Santa Catarina, also has its uranium mine.

There is another mine in Ceara: that in Itaitia; and the Lagoa Real mine is in Bahia. In the woodland savannah territory, in the state of Goias, there is the Amorinopolis

mine. All this has expanded the prospects for Brazil, with its strategic ore, to develop its nuclear program with equanimity and self-sufficiency.

Professor Ancelmo Paschoa emphasizes the peaceful objectives of the Brazilian nuclear program. "Thinking about an atomic bomb would be something beyond aberration in itself, and scandal, in view of the country's Constitution."

Among the benefits produced by nuclear technology, Professor Paschoa cites, in addition to the mastery of uranium enrichment, the guarantee of fundamental information for the construction of small-sized reactors. Furthermore, there is the progress afforded for several universities with independent nuclear activities, as in the case of the Federal University of Rio de Janeiro, in its post-graduate engineering program (COPPE).

The Health Physical Society, an independent professional scientific association in the United States, praised the ability of Brazilian technicians to reduce the damage caused by the accident involving cesium-137 in Goias. According to the CNEN, this attests to the good training of the specialists. The journal of the Association of Physicists in Medicine, also in the United States, judged the level attained by Brazilian technicians in radiological protection to be high as well.

According to the CNEN president, Jose Luiz de Santana Carvalho, a significant new feature of Brazilian nuclear policy is its transparency with respect to the society. He thinks that the nuclear sector's activities should be carried out in the open within the scientific community.

The entity's president commented: "It was a highly positive initiative of the National Congress to create a commission in the legislative area to control the sector. It is important that this oversight be implemented, without any administrative link to the CNEN."

However, the openness is not occurring in the domestic realm alone; it is also reaching into the international arena to an appreciable extent. Brazilian technicians are now conducting inspections in Argentine facilities, and vice versa. The cesium-137 and Chernobyl accidents, of major proportions, brought countries seeking technological progress closer together.

Brazil and Argentina have just negotiated an agreement on safeguards that will make it possible to create an entity to represent them in the International Atomic Energy Agency [IAEA].

The European Nuclear Energy Agency (EURATOM) is the model for the new entity. CNEN assures that, "The flaws of the past have been definitely eliminated." Megalomania has been abandoned, claims Jose Luiz de Santana Carvalho. The extent of the current cooperation between 20 different groups of Brazilian and Argentine technicians perhaps would have been unthinkable in the past.

Although it was not officially announced until later, with a political impact, by President Sarney, it was in 1985 that Brazil mastered uranium enrichment technology, using the ultracentrifugation process. The latter is economically viable, unlike the centrifugal jet process called for in the Brazilian-German Accord.

The Brazilian plans in the nuclear field sustained a severe blow in 1987, with the cesium-137 accident that occurred in Goiania. An abandoned dump containing the radioactive material was to detonate a genuine political bomb in the nuclear program. The cesium and all the material involved in the accident are now stored in metal drums and crates in the Goiania locality of Abadia. From there they will be moved to a final site, where they will be packed and covered with concrete, based on an Italo-Brazilian project for storage and management of radioactive waste.

At present, Brazil is carrying out four projects in the nuclear field: that involving ultracentrifugation; the centrifugal jet project, the continuation of which is being debated because it is not economically viable; the enrichment project, using lasers and described by Ancelmo Paschoa as a "technology of the future"; and the irradiation experimental reactor project conducted by the Army (Secretariat of Science and Technology), which is being reassessed by technicians from the ground forces.

According to Ancelmo Paschoa, the laser project will create major development possibilities in the conventional industrial sector, generating profits for various national businesses.

The CNEN president, Jose Luiz de Santana Carvalho, recently delivered a lecture to colleagues from the Brazilian Physics Association [SBF]. He proposed that the SBF create a commission assigned to check the work performed in both the civilian and military nuclear facilities. "It is the first time that this will occur," claims the head of the entity that is coordinating atomic activities on the national level.

While putting the Brazilian Physics Association in a position to evaluate the transparency currently existing in the nuclear sector, Jose Luiz de Santana Carvalho admits that it is the government's intention to authorize the termination of construction on the Angra-II Power Plant, and most likely on the Angra-III as well. The

decision involving the nuclear power plants is incumbent on the Ministry of Infrastructure and the president of the republic.

The Institute for Nuclear and Energy Research in Sao Paulo produces radioisotopes for health applications. They are benefiting the treatment of approximately 400,000 persons, according to data from the National Commission for Nuclear Energy. The Nuclear Engineering Institute in Rio produces radioisotopes for various hospitals, including the Marcilio Dias, which has an agreement with the CNEN for aiding radiation victims.

Nuclear energy in Brazil is currently being used in the health field, and in electric power production. It is confined to the Angra-I power plant, administratively linked to Furnas Electric Power Plants. During the past three decades there has been progress in the use of nuclear energy in medicine.

In Brazil, the state treating the largest number of citizens with nuclear energy for diseases, especially cancer, is Sao Paulo; followed by Rio de Janeiro, Minas Gerais, and Rio Grande do Sul. Most of the states now have hospital units equipped to make diagnoses and to provide treatment using atomic energy.

The first Brazilian nuclear research began in its oldest reactor, the Triga, located in Belo Horizonte. Later, the Argonauta reactor, belonging to the Federal University of Rio de Janeiro, opened in its Nuclear Engineering Institute.

During the 1950's, the country had among the defenders of the use of nuclear energy for peaceful purposes Admiral Alvaro Alberto, who suffered international pressure as a result. In the 1960's, after studies conducted by the former National Security Council, dissociated from the scientific community and the Congress, the first project was decided for nuclear energy generation: that of Angra-I, through a contract with the U.S. firm, Westinghouse. The power plant was built on the shore at Itaorna, the site of a fishermen's settlement, in the Rio de Janeiro municipality of Angra dos Reis. Its operation has been interrupted on several occasions.

Government technicians argued at the time that, whereas, on the one hand, the Angra-I problems hurt the credibility of the nuclear sector, on the other, they afforded more professional experience in the training of human resources. And in 1975, when the contract for Angra-I was challenged by the scientific community, the Geisel government signed the agreement with Germany calling for the construction of eight power plants, at a total cost of \$30 billion.[passage omitted]

EGYPT

Iraqi Nuclear Equipment Said Sent to Algeria

NC2407180791 Cairo AL-AHRAR in Arabic 22 Jul 91 p 1

[Text] The CIA, the French intelligence service, and the Geneva-based committee investigating nuclear proliferation were convinced that Iraq would be able to manufacture its first nuclear bomb within two years. The nuclear facilities and material in question, however, have disappeared.

Many Western security agencies are secretly investigating reports from their agents in the Middle East that the nuclear equipment and material in question were transported by air to Algeria a few days after the UN Security Council issued its first resolution imposing a naval and land blockade on Iraq.

Washington was extremely disappointed when it received a report from the UN committee that visited Baghdad to inspect Iraq's nonconventional weapons before eliminating them. The report said that all nuclear equipment had disappeared from Iraqi research centers. According to CIA information, at least four research centers existed, two of which were supposedly located near Baghdad. The Iraqis insist that they have only one center, and that it was destroyed during the intensive air raids.

The Americans are now confident that the Iraqis transferred their nuclear arsenal and a large number of their Scud missiles and sophisticated Sukhoi aircraft to Arab countries. Reports indicate that Iraqi experts and scientists working on nuclear projects have moved to Algeria. The information adds that Iraq stored 400 Scud missiles in Yemen and Sudan, and that the Algerian Government helped Saddam store the nuclear equipment.

Perhaps the U.S. decision to appoint Mary Ann Casey, an intelligence and research expert, as Washington ambassador to Algiers to succeed Christopher Ross was prompted by this information.

INDIA

Bush Proposal on Proliferation in Asia Discussed

91WD0918A Madras THE HINDU in English 13 Jun 91 p 8

[Article by C. Raja Mohan]

[Text] The U.S. President, Mr George Bush, has unveiled the long-awaited initiative to curb the arms race in West Asia. The Gulf war and the scale of the international military mobilization needed to end the Iraqi aggression of Kuwait had brought into sharp focus the intense militarization of the volatile region. Throughout the crisis, Mr Bush and his Secretary of State, Mr James Baker, promised a serious diplomatic bid after the war to

reverse the spread of mass destruction weapons and conventional armament in the region.

Regrettably, the Bush initiative has demonstrated once again that when it comes to non-proliferation, Washington's bark is worse than its bite. To be sure, in terms of scope, the Administration's package is wide-ranging. It covers the entire spectrum of proliferation issues including biological and chemical weapons, ballistic missiles, nuclear weapons and conventional armament. On substantive issues, however, it is riddled with contradictions.

The most positive aspects of the initiative relate to control of biological and chemical weapons. Positive because Washington is seeking to dovetail its regional initiative into a larger global and non-discriminatory disarmament regime on eliminating the scourge of these weapons. Mr Bush is urging the strengthening of the 1972 biological weapons convention that prohibits the development, production and stockpiling of biological weapons. Though there have been allegations that Iraq and other Arab States have been engaged in the development of biological weapons, there has been no conclusive proof. In fact, most nations in West Asia are party to the convention. The only exception is Israel. The Bush Administration's instincts would be more credible if it can exert pressure on Israel to subscribe to the treaty.

On chemical weapons too, Washington has given the right impetus. Until now the U.S. had been blocking the efforts to negotiate in Geneva a comprehensive prohibition of chemical arsenals. It insisted on the right to keep two per cent of chemical weapons stocks as a minimum deterrent until all the nations it suspects of 'chemical intentions' sign the treaty. It has now reversed this position by agreeing to destroy all its stocks and join the treaty as a original signatory. The positive evolution of the U.S. position has been facilitated by the apparent lack of utility of chemical weapons in the Gulf war.

Parties to the Treaty

The U.S. is now urging the States of the region to become original parties to the treaty and initiate confidence-building measures even before the treaty comes into force. The central problem in moving forward on chemical disarmament in West Asia is the insistence of a number of Arab States that they have a right to keep chemical weapons so long as Israel has the monopoly of nuclear weapons in the region. This has spurred at least five States—Egypt, Iran, Iraq, Libya and Syria—to maintain chemical arsenal. While Iraq's chemical weapons capability is now being dismantled as part of the post-war settlement, the other Arab nations and Iran would be averse to giving up their chemical arsenal without an Israeli commitment to shed its nuclear weapons. This, in fact, may be the central weakness of the Bush initiative.

On the nuclear front, Washington wants to implement a verifiable ban on the production and acquisition of nuclear weapon materials in the region, the accession of

all States in the region to the Nuclear Non-Proliferation Treaty (NPT) and the eventual creation of a nuclear weapon-free zone in the region. The essence of the deal is that the Israeli nuclear arsenal (said to consist of about 100 to 200 warheads) would be frozen at the current level in return for nuclear and chemical abstinence by the States in the region. That is the meaning of the operational part of the proposal, the cut-off in the production of fissionable material.

Iniquitous Deal

This has pleased neither the Arabs nor the Israelis. The Arab nations and Iran naturally point out the iniquitous nature of this deal and insist that all weapons of mass destruction, including nuclear and chemical, must be eliminated from the region. Israel, on the other hand, is irritated with the U.S. focus mass destruction weapons and demands greater attention to curbing conventional forces as well. The Israeli rationale is fairly simple. Its nuclear monopoly had been accepted, if only tacitly, in the region the immediate nuclear threat from Iraq is now being eliminated. There is no Israeli interest that will be served by raking up the nuclear issue though the U.S. proposal is loaded in favor of Israel. Hence the Israeli argument that the real threat in the region comes from the abundance of conventional armament, which, it says, is no less capable of mass destruction.

Technically the U.S. proposals for the comprehensive regional acceptance of the NPT and the creation of a nuclear weapon-free zone should be in favor of the Arabs by removing Israeli nuclear weapons. But, in reality, it is a different story. The U.S. is not able to impose the NPT on Israel. In the past, Tel Aviv itself backed the idea of a nuclear-free zone, but has hedged it with demands for security guarantees and a peace settlement that will be absolutely unacceptable to the Arabs.

A major component of the Bush package relates to the spread of ballistic missiles. Israel has the most sophisticated arsenal of ground-to-ground missiles. Egypt, Iran, Iraq, Libya, Saudi Arabia and Syria also have missile arsenals, but they are mostly primitive. A number of them have been attempting to upgrade these missile forces. Mr Bush has now called for a freeze on the acquisition, production and testing of surface-to-surface missiles and hopes for an eventual elimination of these from the region. He also urges greater coordination among supplier-countries to restrict the sale of equipment and technology that could be useful in the development and production of these missiles.

Given the track record, it is unlikely that the efforts to curb the spread of missiles through supply side action will succeed. In 1987, seven Western industrialized nations had set up a Missile Technology Control Regime (MTCR). The system has been unable to contain the spread in spite of broad Soviet cooperation. (The USSR is not a formal party to the MTCR). China which is not a member of the MTCR has been aggressively marketing

missiles and missile technology in the region in search of strategic influence and hard cash.

More than China, it has been the utter inability of the Western nations to control their own industry that has undone the effectiveness of the MTCR. The West European and American companies have actively participated in the upgradation of missile capabilities in West Asia. While the U.S. has been the loudest in proclaiming the need to curb the proliferation of missiles, it has been recently reported that the CIA actively encouraged the sale of missile technology to South Africa during 1984-88, some of which had been passed on to Iraq.

The problem of restraint by the supplier nations is even more acute in the case of spread of conventional weapons, which is a new concern that is addressed by Mr Bush. He has called for a meeting of the senior officials of the five Permanent Member-countries of the U.N. Council, which account for 85 per cent of global arms sale, to discuss controls on arms sales to West Asia. The meeting, to be hosted in Paris soon, will consider a "general code of responsible arms transfers," more effective domestic export controls and a mechanism for consultation and exchange of information, including prior notification of sale, among the supplier-nations. But it appears a long way, if at all, before the Great Powers can put together a successful cartel on conventional arms. There are many factors preventing such an outcome.

Striking a Balance

At the conceptual level, finding a balance between the need to prevent proliferation while supporting the legitimate needs of all countries to defend themselves—the two objectives outlined by Mr Bush appear difficult to reconcile besides the obvious problem of defining 'legitimate' needs of defence for any country. Second, the U.S. is in no mood to lead by example in the efforts to curb the spread of weapons. Even as the Gulf war ended, the U.S. announced the sale of nearly \$20,000 millions worth of arms to the region. Just a day after the announcement of the arms control initiative of Mr Bush, the Defence Secretary, Mr Dick Cheney, announced the sale of new arms to Israel and a 70 per cent financial support for the Israeli development of the "Arrow" missile system.

Third, there is growing competition among the supplier nations to corner a shrinking global market for arms. There is increasing tension between the U.S. and West Europe which is moving towards the creation of a common defence market, integrating the European defence manufacturing capabilities and emphasizing the prevention of an independent defence technology base in Europe.

Arms makers in Europe and America are trying to consolidate their own domestic defence markets, accusing each other of protectionism in the defence market and of subsidizing arms exports to the Third World. In such a situation competition rather than

cooperation could be the main tendency in the international arms bazaar. Finally, if it is seen that it is insecurity that drives the arms race in the Third World and not the other way around, the emphasis should shift to peace-making from controlling arms. But in West Asia, the prospects for peace seem as distant as ever.

Notwithstanding these limitations, Washington's arms control initiative could be the ominous beginning of increased international attention to Third World arms control. The current West Asian focus would inevitably expand to include the Indian sub-continent. Israel has already demanded the widening of the scope of the Bush proposal to include Pakistan. India needs to fully gear itself to meet the new challenges to its defence and nuclear and space policies that will emerge from the propaganda onslaught on Third World proliferation. The main thrust of India's response could be along the following lines.

India's Strategic Needs

One is the return to activism in the international debate on arms control and disarmament. After the Rajiv Gandhi initiative on global disarmament in June 1988 at the United Nations, India's arms control attention has tended to flag. A major priority for the new government should be to fashion new initiatives globally and regionally, not as a moral discourse, but as a means of defending India's basic security interests. That, in essence, is to see arms control as the other side of the defence policy.

Two, to strengthen the current policy of exporting arms and demonstrate India's capacity to export not only conventional arms, but also missiles, nuclear services and other dual-use goods and technologies. The aim should be for a place in the various clubs in order to shape the international debate on the politics of export controls. India has so far shown great restraint on exports of sensitive technologies, but has not got enough credit for it. Unless you are recognised as a real spoiler, there would be little benefit in restraint.

Three, to avoid the temptation to slot the Bush initiative in the North-South debate. Washington's comprehensive and non-discriminatory approach on chemical weapons is a triumphant vindication of the Indian position. It should open the way for a more constructive Indo-U.S. dialogue on arms control. Four, India must make a determined bid to take advantage of the current shakeout in the global arms industry, marked by increased competition and reordering. There will be important opportunities for increased co-production and export of arms to third States through cooperation with arms-makers in the U.S. Europe and the Soviet Union. That will require a more outward orientation for the Indian defence and R & D establishments.

Pakistan Nonproliferation Proposal Rejected

91WD0919A Madras THE HINDU in English 8 Jun 91 p 1

[Text] New Delhi, June 7—India has characterized the proposal by Mr Nawaz Sharif, Pakistan's Prime Minister of a five nation initiative to stop nuclear proliferation in South Asia as an exercise in propaganda. According to an External Affairs Ministry spokesman, the suggestions of Mr Sharif seeking to involve the U.S., China and the Soviet Union in consultations with India and Pakistan to keep South Asia free from nuclear weapons is a tactic for diverting international pressure on Islamabad to give up its nuclear weapons program.

Official sources allege that the statement has been timed with the forthcoming visit of a high-powered delegation led by Mr Wasim Sajjad, Chairman of Pakistan Senate, and including Mr Akram Zaki, Pakistan's Secretary-general Foreign Affairs, seeking to assuage U.S. fears that Islamabad is pursuing production of nuclear weapons. The U.S. has suspended aid to Pakistan since late last year under the Pressler amendment which prohibits aid to countries suspected to be involved in producing nuclear weapons.

Officials claim that they find nothing new in the recent suggestions made by Mr Sharif. In fact they claim that the position is a rehash of a well-worn posture that has been adopted by Islamabad for the last several years.

Pakistan has been moving a resolution in the U.N. on a nuclear weapon-free zone in South Asia for the past several years while at the same time relentlessly pursuing a clandestine nuclear weapons program, it is alleged.

India on the contrary, is of the view that security through regional arrangements is illusory given the global reach of nuclear weapons.

It reiterates its position on a time-bound global destruction of all nuclear weapons to usher in a nuclear weapon-free world. The position was elaborated in the 'action plan' stated in the third special session of the U.N. on nuclear disarmament in June 1988 by the then Prime Minister Rajiv Gandhi.

New Delhi, however, has invited Islamabad or any other country towards a phased elimination of all nuclear weapons worldwide in a time bound framework.

Successful Test of Prithvi Missile Hailed

BK2007135191 Delhi All India Radio General Overseas Service in English 1010 GMT 20 Jul 91

[Commentary by Ravinder Pal Singh, senior research fellow at the Institute for Defense Studies and Analysis]

[Text] With the fourth successful test launch of surface-to-surface guided missile, Prithvi, India has moved yet another step closer to a successful culmination of its integrated guided missile development program. The

euphoria from the success of the Prithvi program has to be seen in the context of its contributions to India's security potential, its deterrent values, and sustainability of India's policy of self-reliance in high technology projects. Secondly, one has to take note of reactions and capabilities of comparative missile potential being developed or being made available within the region, and thirdly, the limitations of such technology when involved in a race with technology itself.

The integrated guided missile development program was initiated in July 1983 as a response to the growing awareness of operational value of missile technology. Missiles by virtue of their speed, accuracy and penetrability can bring to bear lethal power against value targets. Consequently, two surface-to-air missiles—Trishul and Akash, one antitank missile—Nag, and one surface-to-surface ballistic missile—Prithvi, were planned for operational deployment in the Indian armed force.

Agni, the intermediate-range ballistic missile, was planned as a technology demonstrator. Prithvi is a surface-to-surface battlefield support missile with single-stage twin liquid fuel motor. The range-payload combination of this missile enables it to deliver 1,000-kg warhead at 150 km or a 500-kg warhead up to 250 km. The warhead has cluster bombs consisting of hundreds of small bomblets which can cause extensive damage to airfields, static installations and headquarters deep inside the enemy territory. And with its minimum range of 40 km, it can provide attractive battlefield targets. Prithvi has a short reaction time and speed of three times the speed of sound. Its accuracy, with a Circular Error of Probability—CEP—of 250 meters at 250-meter range makes it a world class missile.

The control and guidance system is driven by an on-board computer based on Intel AT-86 microprocessor. The system prevents the missile from straying. Such sophisticated systems are not only difficult to develop, but also very expensive. A Prithvi missile is estimated to cost about 17 million rupees. According to earlier reports, the full-scale annual production of such missiles was expected to start from January 1991. But it is likely to be delayed since Thursday's [4 July] test launch does not indicate to be user's test from a vehicle. The missile could be carried by a [word indistinct] truck which also serves as an erector at a launch vehicle.

Successful launching of Prithvi speaks volumes for our scientific skill and progress in defense technology. It should however be kept in mind that similar capacities are being made available in our region. Some reports indicate that Prithvi uses liquid fuel based on dimethylhydrazine with nitrous oxide-based oxidizer. Both these compounds are highly toxic and need extreme care in handling especially under field conditions.

Besides, the fueling time lends itself to detection, especially by satellites, a factor which got highlighted in the recent Gulf war. Secondly, conceptually, the battlefield support ballistic missile should be considered as the first

generation of tactical support missile. The cruise missiles are the subsequent generation of missiles performing the role of battlefield support. Because they can be launched from aircraft as well as from submarines, it makes them less vulnerable than the vehicle-borne ballistic missiles. Besides, the latter's terminal velocities being high, it becomes difficult to mount fuel air explosive warheads on missiles like Prithvi.

The anomaly which is inherent in pursuit of technology by developing countries for military self-reliance is the difficulties in sustaining indigenous high-tech development when comparative technologies can be procured by the regional rivals from the world's arms market. But in case of ballistic missiles, there is a strong concern in the West on proliferation of such technology. Consequently, a U.S.-led Missile Technology Control Regime, MTCR, was initiated in April 1987 to coordinate the national guidelines of Western countries and Japan for preventing transfer of technologies of 500 kgs. Although China is not a member of MTCR, it had agreed to act in a responsible manner in order to control missile proliferation. The major contribution of the integrated guided missile project is the creation of vast missile research establishment which India did not possess seven years ago. Perhaps Prithvi's success will take us a step closer to our goal of indigenizing technologies of a next country [as heard].

IRAN

PRC To Supply Nuclear Technology

PM1207152691 London SAWT AL-KUWAYT
AL-DUWALI in Arabic 11 Jul 91 pp 1, 4

[Unattributed report: "PRC Agrees To Complete Construction of Nuclear Reactor"]

[Excerpts] Tehran, SAWT AL-KUWAYT—Iranian Government sources have told SAWT AL-KUWAYT that the PRC will replace West Germany and France in constructing the Iranian nuclear reactor which these two states started constructing before the outbreak of the Iranian revolution and then refused to complete when the Iraq-Iran war broke out and when the new Iranian leadership abandoned Iran's financial commitments to French and German companies.

The Iranian sources said that PRC Prime Minister Li Peng, who concluded his visit to Iran the day before yesterday, agreed in his talks with President Hashemi-Rafsanjani to provide the necessary expertise and technology for the completion of the Iranian nuclear reactor in accordance with a comprehensive agreement that will make the PRC Iran's biggest trading partner and arms supplier.

SAWT AL-KUWAYT has learned that Hashemi-Rafsanjani and Li Peng have agreed in principle on the substance and framework of the agreement and that

trade, technical, military, and scientific joint committees will prepare the draft. [passage omitted]

It is worth noting that, on the last day of his visit to Iran, Li Peng went to Esfahan to see the city's historical sites; but the main purpose of his trip there was to visit the military complexes in the north and west of the city where PRC and North Korean workers and experts are working side by side with the Iranians on projects to produce ballistic missiles and advanced surface-to-surface and surface-to-air missiles.

The Iranian sources also revealed that Iran and the PRC agreed in principle to increase the volume of their trade exchanges next year to \$5 billion. The PRC will launch for Iran a rocket-launched space satellite to help Iran in the fields of radio and television transmission and in reconnaissance and observation. The PRC will also meet the Islamic Revolution Guard Corps' aircraft, tank, and missile requirements and part of its Army's requirements. [passage omitted]

The sources say that Iranian Air Force Commander Brigadier General Mansur Satari, who is currently in Moscow, is authorized by President Hashemi-Rafsanjani to sign an agreement with the Soviet military production ministry for the purchase of advanced MIG-29, MIG-31, and Tupolev bombers and reconnaissance aircraft. [passage omitted]

PAKISTAN

U.S. Asked To Be 'Consistent' on Nuclear Issue

BK2307103591 Karachi DAWN in English 16 Jul 91
p 11

[Editorial: "Gunning for Iraq Again"]

[Text] There seems no early end in sight to Iraq's troubles. Still suspected of possessing some nuclear facilities, it is under pressure from the permanent members of UN Security Council—mainly the United States—to make a full disclosure of what it has. And it has till July 25 to submit a comprehensive list of its nuclear facilities or face "serious consequences". Iraq's ambassador to the UN who was given this ultimatum says his government has already given the details in a list handed over to the UN a few days ago. But the US says the list is incomplete. Baghdad's predicament is there for all to see. It has urged the UN to stop the US from taking any action.

America has not specified what it will do in case Iraq does not comply with the UN demand. But diplomatic sources have hinted at air strikes against "strategic locations" as one possibility. To further build up the pressure on Iraq, President Bush has approved a list of 20 Iraqi "command-and-control" targets that could be attacked to soften Iraqi intransigence on the nuclear issue. At the back of all this is the US suspicion that Iraq has violated the UN resolution ordering Baghdad to

provide details of the nuclear materials in its possession so that they could be taken away and destroyed.

While the US or UN concern in the matter is understandable there are one or two points that need to be kept in mind. Enough force has been used against Iraq. This matter must be resolved peacefully. We know how the meaning of the UN resolutions passed during the Gulf crisis was extended and made a basis for not just liberating Kuwait as the UN resolutions stipulated but also used as a pretext to take the war to Iraqi territory and destroy Iraq's military potential. US strategic purposes may have been served as a result but much human suffering also ensued. There is a need to avoid that pattern being repeated. All peaceful means available should be used to help bring an end to this crisis. And sabre-rattling, to which the US seems especially prone after the quick-fix victory in the Gulf war, should be eschewed.

The other point relates to the larger question of nuclear capability in the hands of the Third World. This is a point to which we have often returned in these columns. But it is still something which never ceases to amaze. There is little logic in the American obsession about nuclear weapons getting into the hands of what it likes to think are "irresponsible" countries. Hence its opposition against Pakistan's nuclear programme. Hence also its concern about some residual nuclear materials remaining in Iraq hands (that is, if Iraq had any to begin with).

But America's concern goes dead when it comes to Israel. It is no secret that Israel possesses quite a few nuclear bombs. Yet the Israeli nuclear capability is an off-limits area for the champions of non-proliferation. This also applies to India which has a known nuclear capability but which the United States seems to have accepted as a fait accompli. The American position regarding Third World nuclear capability would not suffer if it was more consistent and less selective and discriminatory. But the way things are, it only seems that the aim behind American nuclear policy abroad is not just non-proliferation but the preservation of an iniquitous status quo.

Sajjad: Nuclear Proposal Not for U.S. Aid

BK1306113291 Islamabad Radio Pakistan Network
in English 1100 GMT 13 Jun 91

[Excerpt] The leader of the Pakistan delegation, Mr. Wasim Sajjad, has said in Washington that the prime minister Mr. Nawaz Sharif's proposal for a nuclear nonproliferation treaty in South Asia is aimed at keeping the region free of nuclear weapons so that India and Pakistan could devote their limited resources on urgently needed economic development. Speaking at the Carnegie Endowment, a prestigious research group of eminent experts of international affairs and diplomacy, he said a significant section of Indian opinion makers had asked New Delhi to review its stand on the proposal, describing it as constructive. He said Pakistan was

prepared to listen to any Indian suggestion to make it mutually acceptable. [passage omitted]

Paper Sees Nuclear Freeze in South Asia Beneficial

91AS1074A Peshawar THE FRONTIER POST
in English 23, 24 May 91

[Article by Pervaiz Iqbal Cheema: "Is Nuclear Freeze in South Asia Possible"]

[23 May 91 pp 10-11]

[Text] During the decades of the 70s and 80s the proliferation watchers produced voluminous literature highlighting the dangers of nuclear proliferation and the possibility of existence of an anonymous nuclear striker. The main focus of their thrust has been on the horizontal proliferation although vertical proliferation has been comparatively much more rapid. Proliferation is indeed dangerous for this world. Not only does it make pre-emptive strikes more attractive but the nuclear war can badly damage the very core of this planet. An entire city can become vulnerable to the strike of a single bomber.

Measures to curb the spread of nuclear weapons must be encouraged and efforts should be directed to effectively check the incentives that are continuously inducing nations to cross the threshold from plowshare to military uses of nuclear energy. In order to undertake such an onerous task one needs to study the area somewhat realistically. One such area where the proliferation is on the cards is South Asia and this piece is just an attempt to ascertain whether or not nuclear freeze is possible in South Asia.

Existing Situation

India detonated a nuclear device in May 1974, asserting publicly that it was a peaceful nuclear explosion (PNE). Apart from the Canadians whose reactor CIRUS was instrumental in producing the nuclear device, not many nations attempted to discourage the Indian nuclear pursuits. On the contrary, the French not only congratulated the Indians but also offered help to build a fast breeder reactor. Similarly the Americans readily accepted India's explanation that it was a PNE despite the fact that they themselves had concluded, after running series of tests, that there existed insignificant difference between peaceful and military nuclear devices. The Americans' quick acceptance of the Indian interpretation of Rajasthan nuclear explosion code named 'Smiling Buddha' was primarily caused by the hope that the acceptance would make it easier for the Indians to stop there and not embark upon the path leading to nuclear weapons. At the time many Americans did not overreact primarily make India a nuclear state and in order to become one, it would need to acquire and perfect its delivery system. Today, India has not only acquired heavy bomber and is feverishly engaged in perfecting its missile technology but has already attained a desired level of self-sufficiency in the field of nuclear technology.

Pakistan's response to the Indian explosion was a mixture of frustrations and aspirations. It was dismayed and frustrated by the impressive scientific advancement demonstrated by the alleged PNE but its prime minister expressed determination to quickly match the Indian accomplishments. Since Bhutto's assertion in 1974 to acquire nuclear capabilities comparable to that of the Indians, most western and socialist countries along with the Indians are convinced that Pakistan is going to become a nuclear power. In view of the long antagonistic relationships between India and Pakistan, it is often concluded that Pakistan is on top of the list of 'most likely' future members of the nuclear club. A systematic campaign of vilification was initiated against Pakistan in order to deter her from going nuclear. Instead of discouraging the Pakistanis, the campaign itself strengthened the hands of those who wanted Pakistan to go nuclear. However, the government of Pakistan frequently denied any intentions of going nuclear and repeatedly asserted that Pakistan's nuclear programme was entirely for peaceful purposes. Being a vulnerable and insecure country living under the uncomfortable shadow of its powerful, hostile, nuclear capable neighbour, Pakistan opted to pursue a policy of ambiguity and uncertainty with regard to its nuclear pursuit. It really does not want to go nuclear but it could not afford to foreclose the nuclear option either. Besides its energy needs are pressing enough to warrant quick acquisition of nuclear technology. One account indicates that with the rapidly escalating demand on energy, the gap between the requisite level of electricity-generation and the actual production of electricity by the turn of this century may turn out to be at least 5,000 MW. A press report, in 1986, even went to the extent of alleging that India never really abandoned its secret nuclear weapon programme and Mrs. Gandhi ordered to actively resume work on nuclear weapons programme after her return to power in 1980. Pakistan's response was rather encouraging as it invoked no reaction. However, India has been reacting to almost all reports alleging that Pakistan is engaged in nuclear bomb pursuit. What is perhaps the most interesting aspect of this reaction is that India is simultaneously engaged in enlisting American and Soviet support to pressurise Pakistan to abandon its quest for nuclear technology on one hand and encourage Pakistan to openly make a bomb on the other. Disappointed over Pakistan's inability to opt for the bomb, many Indians are now engaged in projecting the theme that Pakistan may be viewed as a nuclear power even though it has not yet exploded a nuclear device.

The Indian goals in nuclear fields seem to be to attain self-reliance and self-sufficiency in nuclear technology and to keep the nuclear weapon-option open. It would remain open until the existing nuclear weapons states begin to take tangible steps like introducing a freeze on or reducing the existing nuclear arsenal. India's vision of its own greatness requires that it should enjoy similar types of prestige and role in world affairs which the current nuclear weapons states have, but it realises the problems involved. It stresses the nuclear disarmament

because such an eventuality would take India nearer to the desired and visualised position but it also recognises that such development may not take place for quite sometimes and that is precisely why it retains its weapons option open. It is a case of pulling others down and pushing oneself upward in order to attain closer proximity to the desired status and role in world affairs. The PNE enabled India to gain entry into the exclusive nuclear weapon states club through backdoor but it also provided India an argument to publicly pronounce that it is a non-nuclear weapon state. Besides PNE status reflects a compromise between the domestic hawks and pacifists.

The ambiguity of the situation not only keeps the Indian hawks satisfied with the maintenance of nuclear weapons option intact but also allows India to publicly assert its policy pursuits for global disarmament which in turn, pleases the pacifists.

Changing Environment

Both India and Pakistan have pursued somewhat similar strategies of nuclear ambiguity primarily aimed to secure minimum deterrence. Ambiguity reflects adherence to the delay-option which presumably seemed to be based on the acute realisation of the cost involved and the likely pressures that could be generated by contemplated weaponisation. While it is true that the nuclear programmes of both countries are product of many factors like insecurity stemming from neighbours' behaviours and military strength, prestige value, energy requirement, domestic compulsions, in case of Pakistan an additional factor has been the unreliability of its friends and allies (both from Western and Muslim blocs). Unable to have secured a nuclear umbrella, a cautious drift towards self-reliance is somewhat inevitable. However rapidly changing circumstances not only impede the desired drive towards self-reliance in this field but could also compel nations to transform the existing policy pursuits and establish congruity between the adopted policies and changed circumstances. Let me highlight few developments that have altered the global and regional environment.

Undoubtedly the most important development is the reduction of East-West tension and the expiry of the cold war. Essentially this means two things, the increased chances of reducing horizontal as well as vertical proliferation. Need to check for vertical proliferation intensifies as the rationale to improve nuclear weaponry is eroded. Similarly the ability to influence the threshold states to refrain from securing nuclear weapon increases. The death of the cold war and the subsequent emergence of the United States as the only superpower without any equally powerful counterbalancing lever, enhances its stature to exert concerted pressures on the 'likeness.' Among the many options the Americans could pursue include to vigorously pressurise both India and Pakistan in order to force compliance with NPT (non-proliferation treaty), support an alternative NPT that might accommodate the demands of India and Pakistan,

push both India and Pakistan to move towards an overtly declared weapon status, abandon its established regional policy and throw weight behind one and undertaking tough measures against the other, continue the present policy without much change, modify the current policy with marginal changes as required by the global and regional climate.

The second major development that has radically altered the existing environment is the recent comprehensive defeat of Iraq. The Gulf war indicated not only that the number game is no longer applicable to modern wars and highlighted the importance of modern technology but it also demonstrated the American abilities to secure impressive diplomatic victories at the UN level as well as to isolate Iraq within the Muslim bloc. The third identifiable trend that is somewhat inadvertently contributing substantive shares towards changing the regional environment is the return of democracy in Pakistan and the generation-change in South Asia. The advent of new generation leadership generates hope that new efforts could be made to check the undesired drive towards nuclearisation. Already both Benazir Bhutto and Rajiv Gandhi had formalised their undertaking not to attack each others nuclear installation in December 1988. A good beginning that could be further expanded and efforts could be directed to secure some kind of regional arrangement to check the drift toward nuclearisation. Fourth factor that could have impact on South Asia nuclear developments is the easing of tension between China and India. Continuous reduction in Sino-Indian tension could influence the thinking of many Indians who regard nuclear weapons as essential to cope with Chinese threat. The fifth significant development in the region is the signing of Geneva Accord which delinked not only the Soviets from Afghanistan but also completely eroded the rationale of American involvement and the possibility of placing the nuclear issue on Pak-American bilateral agenda rapidly increased.

Nuclear Futures

Among the South Asian nuclear futures that could be easily visualised include the renunciation of nuclear weapons, weaponisation of the region, calculated ambiguity and innovative statesmanship. Renunciation of nuclear weapons implies two variables; signing the NPT or giving up the quest to acquire nuclear weapons without being signatory to the NPT. The second alternative does not necessarily allow any type of inspection or verification. Obviously the major advantage that could accrue from exercising this option is that not only one of the main irritants between the major actors of South Asia would be removed but would also spare a sizeable chunk of resources to be allocated elsewhere. Dumping the option to acquire weapons would undoubtedly impede rather effectively the alleged incumbent nuclear arms race. It could not only signal to all other threshold states the futility of the acquisition but the region may also be heralded as the peace-promoter. Renunciation could also resuscitate and accelerate the ongoing process of normalisation between India and Pakistan. However,

given the existing threat perceptions and expressed commitments, this option seems somewhat impracticable at the moment. Just as Pakistan's nuclear policy is a function of its competition with India, India's nuclear pursuits are directly linked with its perceived threats from China and Pakistan. Besides, India also regards the NPT as a discriminatory treaty and thus it is totally unacceptable. Perhaps the most significant disadvantage the renunciation implies is giving up the weapons-acquisition option.

The second futuristic scenario that one can think of is that of weaponisation of South Asia. If the current trend continues, it can be easily augured that the incumbent slow drift would end up into *de facto* weaponisation. Quick weaponisation or even slow moves further down the nuclear weapons path could entail grave risks. Being acutely conscious of these risks, both seems to have opted for slow drift. Although officially India has been stressing that it would go nuclear—that is to acquire nuclear weapons—only if Pakistan makes the bomb, slow drift is deliberately adopted as time is required to perfect its all the three delivery systems. The public Indian posture suggests that the decision to produce and deploy nuclear weapons rest more with Pakistan than with India. This is not true. In fact what India believes is that weaponisation is something essential for its visualised great power status. A public opinion poll conducted in the early 1980s, covering 15 leading Indian cities concluded that more than 70 per cent of the urban residents wanted India to acquire nuclear weapons capability regardless of what its neighbours were doing. In addition many influential Indians promote the notion that new Indian generations should think in terms of global roles.

Most western writers tend to assert that Pakistan should be prevented from acquiring nuclear weapons. Undoubtedly the underlying assumption is that if Pakistan does not go nuclear—India will not go nuclear. Despite Pakistan's repeated denials that it has no intentions of acquiring nuclear weapons, the western analysts continue to regard Pakistan as the potential culprit. This, of course, does not reflect the true picture. In fact it would be India's future decisions for its nuclear programme that will determine Pakistan's position on proliferation. Cognizant of 43 year old antagonism coupled with India's vision of its own greatness clearly makes it somewhat incredible to believe that India would allow Pakistan to forge ahead of India in the field of nuclear weapon acquisition. However it also needs to be highlighted that despite vociferously drummed nuclear programmes of both countries, neither India nor Pakistan has allowed to let go the unilaterally applied restraints. For Pakistan, perhaps the period to detonate a nuclear device was in between 1982 to 1984 when the United States had already secured the waiver for Pakistan and signed an economic assistance and military sales package with Pakistan on one hand and was unflinchingly determined to secure deep Soviet involvements in the Afghanistan quagmire initially and then capitalise over Soviets

presence in almost the same way as the Soviets did over American presence in Vietnam on the other. Missing this opportunity simply meant that Pakistanis were determined not to abandon the self applied restraints. This, in turn, clearly indicated Pakistan's preference.

The third situation could be the continuation of the currently operative calculated nuclear ambiguity. Several reasons could be put forward to support the contention that the most likely nuclear future for the next decade or so will be the existing ambiguity. Calculated ambiguity allows to keep one's option open, provides an opportunity to continue making advancements in the nuclear field without being accused of proliferation, proves to be an extremely useful policy to keep both hawks and doves hopeful, contributes somewhat indirectly towards collective efforts of total nuclear disarmament, provides a face saving device, and can pay desired dividends in the national politics. Late President Zia-ul-Haq used to regard ambiguity as the essence of deterrence. He even described the region as having attained a stable nuclear deterrence based upon ambiguity.

Adherence to a strategy of ambiguity implies that during the next decade both India and Pakistan would not only continue to improve their existing nuclear capabilities but could also produce near nuclear weapon-grade material. Compared to Pakistan, India has often made good use of ambiguity. While it is true that the most important and vitally significant details of nuclear programmes are known to only few concerned people (decision makers and technical staff) of their respective governments, the stoppage of American aid on the grounds of Pakistan's advances on the nuclear path clearly reflects the knowledge acquired by the outsiders. With rapidly advancing snoop technology it may no longer remain possible to maintain an effective level of ambiguity.

The final scenario is heavily dependent upon the vision and statesmanship of our decision makers. It reflects a fruitful patch of innovatives statesmanship. Both India and Pakistan have had their fill of politicians and their game-pursuits for short term power orientated status. The need of the hour is that of a statesman whose vision could clearly reflect the long term wisdom aimed at the lowering of the incumbent tension level and attempting to create an atmosphere in which neither country feels the need for nuclear weapons. Innovative statesmanship would make the general sources of tensions as the prime target and produce series of new proposals to reduce the need for nuclear weapon acquisition. Given the existing level of antagonism and distrust, it is possible many new proposals in the initial phase may prove to be non-starters. Balanced proposal paying due considerations to the legitimate interests of both countries are likely to attract the attention of the decision makers. Impressive proposals like Nehru's call for a comprehensive Test Ban Treaty (CTB), Pakistan's proposal of Nuclear Free Zone, India's Peace Zone concept, China's declaration of no first use of nuclear weapons and Indo-Pak agreement on

non striking each others nuclear installations have contributed significantly towards the overall amelioration of atmosphere. Similar types of proposals generating total impartiality and advancing collective welfare of the region could be initiated. Reactive policies should need to be replaced with innovative initiatives. Since Pakistan reacted to Indian explosions of 1974 and India reacted to Sino-Indian war and subsequent Chinese nuclear explosion in 1964, it seems imperative for both India and Pakistan to abandon the reactive aspects of their policies. They need to come to some kind of understanding concerning their respective nuclear programmes if they really want to avoid the dreaded nuclear winter. Transformation from ambiguous to declared status is a feasible proposition provided South Asia is flooded with innovative initiatives aimed at obstructing effectively slow drift towards weaponisation.

Compared to India, Pakistan has been relatively more innovative. For example it proposed simultaneous adherence to NPT and acceptance of full scope safeguards of IAEA, establishment of nuclear weapons-free zone in South Asia, a joint declaration renouncing acquisition or production of nuclear weapons and reciprocal inspection of each others facilities. Since India's nuclear programme is, in some ways, linked with China, innovative proposals dealing with Asian nuclear problems as a whole could be devised with triangular co-operation and consultations.

[24 May 91 pp 10-11]

[Text] Regional nuclear freeze is possible provided both countries express their earnest desire to avoid the nuclear confrontation. In my opinion it can be done in four stages; demonstration of genuine desire to rid the region of nuclear hydra; quick learning of the consequence of nuclear war, introducing a pause in nuclear manufacturing; and transforming the pause into a permanent freeze. Initially both India and Pakistan should declare their genuine intentions to avoid nuclear weapon's acquisitions. To convince India, Pakistan could be little more bold and announce to bring all sensitive nuclear installations under civilian control, thereby removing Indian suspicions. Continued military control even over a few of the nuclear installations, does not necessarily generate peaceful orientations. India also needs to respond with equally positive measures like promoting the notion of regional verification or offering nuclear power plants to Pakistan.

Alternatively, India could also suggest a regional conference of SAARC countries to resolve the ongoing Kashmir dispute. Second, not only the people of South Asia need to be informed about the consequences of nuclear holocaust in a realistic manner but this learning process should be accelerated. Both the government agencies as well as non governmental agencies should play their role in informing the public of the likely consequences. The recent conference on 'physical and biomedical consequence of nuclear war' is a step in the right direction. Third, having informed the public, then

the two governments could work on agreement developing a pause in their nuclear programmes. To ascertain whether or not pause has been genuinely introduced, a regional scheme of verification will have to be developed. Once the pause is effectively introduced, then after the passage of few years the pause could be transformed into permanent freeze.

The track record indicates that the above mentioned proposals, however noble they may appear, would not gain acceptability among the decision makers of both countries primarily because of two reasons, the security perceptions accompanied by the incumbent high level of insecurity and lack of innovative spirit. Pakistan feels threatened from India and India either by choice or by temperament does not make it easy for Pakistan to be able to remove insecurity. India perceives threat from China and Pakistan especially from a somewhat exaggerated and imaginative collusion of China and Pakistan. Perhaps a multilateral effort to deal with regional security could be stepped up with equally matching efforts on the part of China to facilitate the collective South Asian security pursuits. In addition, it needs to be mentioned that until the major issues, that continuously generate tensions and insecurity like the ongoing Kashmir dispute, are resolved, the security dilemma will continue to impede efforts to check drift towards nuclear weaponisation.

Lacking in innovative spirit, both South Asians' countries, in their quick reactive moves often tend to not only complicate the issues more than it is necessary but also provide fodder to regional prophets of doom. Some of these augurer are infact lobbyists while the others have acquired the habit of reading too much out of even the most pliant situation. What is perhaps surprising for me is that sometimes even an idea or statement that appears pregnant with innovative characteristics becomes victim of internal political bickerings. Negative verbal bashing based on linguistic dexterity is manifesting almost regularly in our complex environment. Nobody wants to miss any opportunity to get even, in some cases almost immediately, with its adversaries. Perhaps the age old maxim 'wisdom in silence' has become too old to pay desired dividends under the operative rules of the game. An opposition leader recently expressed in Pakistan that she is a non proliferationist and is against the nuclear arms race in South Asia. The government officials quickly and vociferously responded that the country would, at no cost, compromise its incumbent nuclear policy. Apart from providing unnecessary fire-power to the critics in U.S. Congress and perhaps securing some marginal dividends on domestic front, one fails to comprehend the utility of such a quick response. On the contrary, the government should have either kept quiet and waited for Indian reaction or supported the idea in principle. Supporting the usefulness of such statement does not necessarily imply a quick compromise over the existing nuclear policy. Examples of similar responses could also be easily found in India as well especially if one carefully reads the quick Indian reactions over many

statements and ideas expressed regarding the ongoing Kashmir dispute. Since both India and Pakistan claim to be committed to non proliferation and frequently express desires for stable peace in the region, would it be asking too much if one of them takes an innovative initiative and agrees to sign the NPT unilaterally or opens its nuclear facilities either to IAEA or to a regional multilateral association like SAARC. In my opinion Pakistan needs to demonstrate such a spirit in view of its enormous energy problems. Besides, it still is long way away to claim any type of parity with Indian nuclear programme. Such a move could be made conditional to the availability of nuclear power plants. Reported assertion on self reliance is undoubtedly a noble pursuit but it cannot be attained quickly. The energy problem is not only currently confronting the Pakistanis but is also causing enormous problems. It is time now to opt for realism and pragmatism instead of continuously dwelling heavily upon idealism and idealistic pursuits.

Given the existing regional situation and internal political dimensions, my own assessment of the prospects is that calculated ambiguity coupled with slow drift towards weaponisation appears more realistic than to expect innovative statesmanship that may end up in signing the NPT unilaterally or working out a regional nuclear arrangement. The changed environment has not been able to radically alter the operative nuclear ambiguity in South Asia. The recent aid cut has invoked strong reactions among certain section of Pakistani society. While some genuinely feel let down and in consequence are exerting strong pressures on the government to pursue policies aimed at self reliance, the others are merely using this development to accelerate the incumbent slow drift towards weaponisation. The latter group tend to thrive heavily upon the existing insecurities that are either the product of India's overall policies towards Pakistan and its handling of the Kashmir dispute or India's impressive military strength along with its nuclear weapons capabilities. Besides, periodically this group also employs the Muslim card in one form or the other.

What is perhaps much more surprising is the American inability to comprehend the intensity of regional rivalry

and commitments even after the passage of more than 40 years of their involvement. Despite impressive global developments, changes in the region have been somewhat marginal. The major sources of tensions and conflict are still very much active. To stop proliferation needs concentrated genuine efforts to remove all those incentives that are compelling the threshold states not to abandon their nuclear options. To undertake punitive measures in order to prevent proliferation and secure nuclear freeze are likely to accelerate the proliferation process and strengthen the hands of proliferationists in most Third World societies with a developing political culture.

Afghan Fires Scud Missile

*BK1907024091 Islamabad Radio Pakistan Network
in Urdu 0200 GMT 19 Jul 91*

[Text] Pakistan has strongly protested to Afghanistan the flagrant violations of Pakistani territory by forces loyal to the Kabul regime. The Kabul regime's charge d'affaires was summoned to the Foreign Office yesterday, and was told that Afghan forces fired a Scud missile at the Ali Mangal area of Kurram Agency on 5 July. Two Kabul regime aircraft violated Pakistani airspace in North Waziristan Agency and dropped a bomb on 12 July. The Afghan charge d'affaires was asked to convey to the Kabul regime the message that all responsibilities for the serious consequences of such premeditated and unprovoked attacks will rest with Kabul authorities.

SUDAN

Minister Denies Iraqis Storing Nuclear Material

*NC2507182591 Cairo MENA in Arabic 1724 GMT
25 Jul 91*

[Text] Cairo, 25 Jul (MENA)—During a stopover today at the Cairo airport en route to Amman, 'Abdallah Muhammad Ahmad, Sudan's minister of culture and information, denied foreign media reports that Sudan agreed to store Iraqi nuclear and chemical weapons on its territory. He also said the current coolness in Egyptian-Sudanese relations is natural in the course of events, adding that no mediation is needed to clear the air between the two capitals.

12 Nuclear Missiles Removed From Germany*LD1307182291 Berlin ADN in German 1745 GMT
13 Jul 91*

[Text] Berlin (ADN)—In the past week the Soviet Union has withdrawn 12 more missiles with nuclear warheads from the territory of the former GDR. The BERLINER KURIER AM SONNTAG learned this from Soviet military sources.

Thus, Soviet President Mikhail Gorbachev has kept a promise he made to Federal Chancellor Helmut Kohl during their meeting in Kiev last week. They were improved Scud missiles with a range of 2,000 kms.[figure as received]

The so-called Fox's Den, the German command headquarters of the Soviet Union and Warsaw Pact in the event of nuclear war, has in the meantime awakened the interest of American arms producers. Last week a delegation from a U.S. company inspected the establishment in a disused mine near Bad Saarow, in the Rauen Hills. The four floors, under 20 meters of concrete, were still full of the most modern electronics at the Soviet Union's disposal. The missiles near Waren-Mueritz, Pinneberg near Schwedt, Jena-Lobeda, Eisenach, and Lychen had been controlled from the "Fox's Den." The establishment had been handed over to the Bundeswehr. (The article was pre-released in an edited version—ADN)

Urges DPRK To Sign Nuclear Accord*SK2207131391 Seoul YONHAP in English 1259 GMT
22 Jul 91*

[Excerpts] Moscow, July 22 (OANA-YONHAP)—Soviet Vice President Gennadiy Yanayev, meeting with a visiting South Korean ruling party official Monday, said Moscow will try to convince North Korea to sign and fully implement the Nuclear Safeguards Accord. [passage omitted]

North Korea's next move after joining the United Nations should be signing and faithful implementation of the Nuclear Safeguards Accord, Yanayev said. South Korea should negotiate with the United States, the Soviet Union with North Korea to make possible such a move, the Soviet leader said.[passage omitted]

G-7 Declaration on Nonproliferation*LD1607183791 Moscow TASS in English 1818 GMT
16 Jul 91*

[By Sergey Sosnovsky, Andrey Fedyashin, and Viktor Khrekov]

[Text] London July 16 TASS—Leaders of the Group of Seven countries today called for strengthening the regime of non-proliferation of nuclear, biological and chemical weapons as well as adopting specific measures to restrict arms sales. In a "Declaration on Conventional Arms Transfers and NBC [nuclear, biological, chemical]

Non-Proliferation" the delegations said the responsibility rested with both arms suppliers and recipient countries as well as with the international community as a whole. In the field of conventional arms exports they proposed applying three principles: "transparency, consultation, and action."

The first principle provides for greater openness about international deals involving conventional weapons. As a concrete step in this direction the declaration proposes "a universal register of arms transfers under the auspices of the United Nations." It will receive information on a regular basis on all transfers of this type.

The principle of consultation is based on discussions between all leading arms exporters "with the aim of agreeing on a common approach" to conventional arms trade.

The principle of action provides for specific steps "to prevent the building up of disproportionate arsenals."

The document especially stresses the need for "moderation in the level of military expenditure," especially for developing countries.

The G-7 leaders again urged Iraq to abide by Security Council Resolution 687 and destroy, remove, or render harmless its nuclear, biological, and chemical warfare and missile capabilities as well as to agree to international verification and long-term monitoring.

The participants in the meeting reaffirmed their will to work to establish consensus in favour of "equitable and stable non-proliferation regime, based on a balance between nuclear non-proliferation and the development of peaceful uses of nuclear energy."

They reaffirmed the importance of the Nuclear Non-Proliferation Treaty and called on all other non-signatory states to subscribe to this agreement. The G-7 leaders pointed to the need for all non-nuclear countries to meet IAEA [International Atomic Energy Agency] nuclear safeguards.

The document confirms the common desire to maintain and reinforce the NPT [Nuclear Nonproliferation Treaty] regime beyond 1995. It also points out that "our aim is a total and effective ban on chemical and biological weapons", support for the elaboration of a strong, comprehensive, and effectively verifiable convention banning chemical weapons.

Foreign Ministry Officials Deny Sale of Uranium*OW2607050791 Moscow INTERFAX in English
1800 GMT 25 Jul 91*

[Transmitted via KYODO]

[Text] Despite the allegations of some news media, in Mozambique there is no Soviet uranium sold at the black market. Some publications claimed that it was stolen

from a Soviet ship in the port of Maputo where it was sold in odd packing. As Soviet Foreign Ministry officials said, these allegations are absolute lies.

They are lies primarily because the very possibility that a Soviet ship with uranium on board can emerge in a Mozambican port is ruled out. Under signed contracts

and established practice the Soviet Union exports uranium by sea only to West European countries. As for other regions of the world, such deliveries are carried out only by plane.

Secondly, only standard containers which answer to the corresponding international norms are used for transporting this kind of material. Considering all this, the emergence of Soviet uranium at the black market in Mozambique is out of the question.

AUSTRIA

Charges of Missile Delivery to SFRY Denied

*LD2307160891 Belgrade TANJUG in English
1440 GMT 23 Jul 91*

[Text] Vienna, July 23 (TANJUG)—Austria has firmly rejected allegations that missiles have been delivered to Yugoslavia via its territory.

The allegations have been published in the Belgrade daily POLITIKA which quoted Federal Customs Administration Director Radosav Sekulic.

The Austrian Foreign Ministry as well as the National Defence and Interior Ministries have known nothing of the mentioned deliveries, as the Austrian Foreign Ministry announced here last night.

One of many arbitrary allegations which have been brought up against Austria of late and which must resolutely be rejected by the Foreign Ministry, is apparently at issue in the respective reports, the announcement said.

Carrying reports on missile deliveries to Yugoslavia via Austria, some Austrian newspapers today said "renewed accusations" on the part of Belgrade were involved. The papers also published denials by Austrian officials.

FRANCE

Cooperation With UK To Reprocess Iraqi Uranium

*PM1807105691 Paris LE MONDE in French 18 Jul 91
p 5*

[Jean-Paul Dufour report: "France and Britain To Recover Iraqi Uranium"]

[Excerpt] France and Britain are going to help the International Atomic Energy Agency [IAEA] recover and reprocess the nuclear fuel held by Iraq. This measure, the IAEA stressed in a communique published on 16 July, falls within the framework of UN Security Council Resolution 687, which makes provision for the seizure and subsequent destruction of Iraq's nuclear materials.

The contract signed with the IAEA relates to the fuel from the three Iraqi reactors, all installed on the Al-Tuwaytha site in the Baghdad region, according to the Atomic Energy Commission in Paris. It consists of 11.3 kg of highly enriched (93 percent) uranium supplied by France in 1980 for Tammuz-2, a small 500-kilowatt French reactor which, it seems, was never operational; and 22 kg of 80-percent enriched Soviet uranium intended for a 5-megawatt reactor (IRT-5000) supplied by the USSR in 1967.

One-third of the Soviet uranium is under the ruins of the IRT-5000 bombed (like Tammuz-2) by the Americans during the Gulf war. Osirak, the third reactor on the site,

built by the French, was destroyed in 1981 by the Israeli air force and had never received its fuel.

Placed under the control of Euratom and the IAEA, the Iraqi uranium will be "diluted" to reduce its level of enrichment to less than 20 percent. That operation will render it unsuitable for the manufacture of nuclear weapons but will nonetheless enable it to be used in research reactors. Resolution 687 makes provision for Iraq to be able to continue to conduct nuclear experiments for peaceful purposes under permanent international monitoring. A plan should be submitted to the Security Council on this subject in August, the Vienna agency explained.

This agreement therefore only relates to the nuclear materials "officially" held by Iraq. For the time being, no provision has been made for the uranium which Iraq might have succeeded in enriching by its own means and about which the international experts are asking questions. The Baghdad authorities claim to have produced only 500 grams of uranium enriched only to a small degree (to 4 percent) whereas the United States is talking of 40 kg. "For the time being," a spokesman for the Vienna agency said, "we are not certain about this subject, and we can only build scenarios on what we have observed on the spot." [passage omitted]

Arms Industry Seen To Benefit From Gulf War

91ES0900C Paris LE MONDE in French 3 Jul 91 p 8

[Article by Jacques Isnard: "French Arms Industry Profited From Gulf Crisis"]

[Text] In 1990, export orders for French arms increased 67 percent over the previous year. That spectacular increase was due to ground weaponry purchases by Saudi Arabia and Kuwait. It was something of a surprise: Noting the alarming decline of arms exports in 1989, a parliamentary report the previous year (LE MONDE, 9 November 1990) had predicted a continuation of that trend in the first half of 1990.

For the first time, Defense Minister Pierre Joxe agreed to parliament's request for a discussion of arms sales to foreign countries. The president of the National Assembly defense committee, Mr. Jean-Michel Boucheron, PS [French Socialist Party] deputy from Ile-et-Vilaine, had written the government in May asking for an annual report on the arms trade.

Mr. Gerard Renon, who was responsible for arms exports as state secretary for defense under Jean-Pierre Chevenement, had appeared before the committee in December 1989 to discuss this question.

Mr. Joxe, having himself promised to keep parliament informed on France's arms export policy, spoke to the defense committee deputies late in the afternoon of Tuesday 2 July at Bourbon Palace.

Returning Normalcy

Responsibility for keeping up-to-date statistics in this domain rests with the International Relations Delegation (DRI) of the General Delegation for Armaments [DGA].

According to DRI, export orders taken in 1990 amounted to 33.4 billion French francs [Fr], an increase of 67 percent over the previous year. It is true, however, that 1989 was a year of steep decline for this sector in France, with orders totaling only Fr20 billion.

The appearance of new competitors, new financial constraints on buyers, the dollar's exchange rate, the Vienna accords on East-West disarmament in Europe, lack of aggressive marketing, and the inadequacy of French arms makers' post-sales network all contributed to the slump in foreign purchases that year.

Thus 1990 represented a spectacular rebound from an exceptionally poor year. What actually happened last year was that orders in the sector bounced back to their normal levels. In point of fact, export orders between 1985 and 1989 averaged Fr31.2 billion in current francs.

Last year, orders for ground equipment came to some Fr17.4 billion, with aviation orders amounting to Fr11.4 billion and naval orders to about Fr4.6 billion.

According to a DRI analysis prepared in mid-May, what distinguished 1990 from previous years was the return in force of Middle East customers and a resurgence in orders for ground equipment. There is no doubt the Gulf crisis had an impact on the French arms industry, both before and during.

The Middle East and the Maghreb accounted for more than half of all orders placed in 1990, compared to just over one-third the total in 1989. [Orders from] West Europe and North America are in sharp decline. On the other hand, there has been a slight increase in the Far East, especially Singapore. Also, ground equipment surged into first place, accounting for 52 percent of the total (it had fallen to 35.5 percent in 1989), while aviation equipment fell to 34 percent (from 52 percent in 1989). The low level of naval orders remained basically unchanged.

If the French arms business essentially bounced back to a normal level in 1990, it was because of orders placed by Saudi Arabia and Kuwait, mainly for armored vehicles, cannons and ground-to-air weapons systems. For some time before that, French arms makers had been striving for better geographic balance, by trying to reduce the traditionally disproportionate share of sales to the Middle and Near East. From that perspective, 1990 was an atypical year.

GERMANY

Soviet SS-23 Missiles To Be Destroyed

AU2607115991 Cologne Deutschlandfunk Network
in German 1100 GMT 26 Jul

[Text] The 24 Soviet SS-23 missiles that the Bundeswehr took over from the former GDR National People's Army [NVA] will be destroyed before 1994. A spokesman for the Defense Ministry today confirmed a report published by the Essen daily NEUE RUHR-ZEITUNG that, in connection with the scrapping of the weapons, there are technical problems related to the disposal of the highly toxic fuel. He said that an environment-considerate method of destroying the missiles has yet to be developed. According to the spokesman, the missiles are useless because they have no warheads and no launching pads.

Problems Noted in Destruction of SS-23 Missiles

LD2607110791 Hamburg DPA in German 0015 GMT
26 Jul 91

[Text] Essen (DPA)—Since German unification, the Bundeswehr has had 24 Soviet SS-23 missiles that are "to be destroyed as soon as possible," today's edition of Essen's NEUE RHEIN NEUE RUHR ZEITUNG reports. Citing a Defense Ministry spokesman in Bonn, the newspaper says there were technical problems in destroying them connected with disposal of the highly poisonous fuel. According to the report, the 24 missiles are "in a non-deployable condition without warheads and without launch vehicles."

During the past few days, there has been a controversy between the United States and the Soviet Union over this type of missile. The Americans suspected that Moscow was not sticking to the INF treaty which prescribes the destruction of all nuclear missiles with a range of 500 km to 5,000 km. The SS-23 falls in this category.

Arms Trade, Chemical Plant Sales to Iran Noted

91GE0373A Hamburg DER SPIEGEL in German
15 Jul 91 pp 23-24

[Unattributed article: "Tomorrow's Scandal: Bonn Supports Export Trade With Iran—As It Once Did With Iraq"]

[Text] The negotiations stretched out for weeks. By turns, the managers of the aviation concern Deutsche Aerospace (Dasa) and Iran Aircraft Industries would meet, on this occasion in Teheran, on the next, in Munich.

Business dealings amounting to over 250 million German marks [DM] had involved the Iranian head of state Ali Akbar Hashemi Rafsanjani and Ashraf Pahlavi, a sister of the former Shah. Bonn's Foreign Ministry had

been informed and was interested in the deal's conclusion; Germany's former ambassador to Iran, Jens Petersen, assisted.

Aircraft, which belongs to the Iranian Ministry of Defense, wants to order 35 aircraft of the type Do-228 from Dasa, which is a Daimler subsidiary. A contract was signed on 1 July with regard to the first four aircraft, and the Persians want to build the remaining 34 under license.

The Do-228, which is held in high regard by civilians and military alike, can be used to detect oil offenders at sea, but the military likes to use it as well; the German Navy tested the airplane years ago as a reconnaissance aircraft with successful results.

Once again, Teheran may be supplied with nearly everything that there is, whether it be on land, on the sea, or in the air.

Bonn's minister of the economy, Juergen Moelleman, is expecting orders running into the billions to start coming in soon. For example, Siemens is delivering an electric power plant that has both gas and steam turbines, and the Kloeckner Industrial Plants are said to be building a gigantic paper mill on the Caspian Sea. Once again, Iran is Germany's preferred customer in the Near East.

But the joys these big deals entail are not unalloyed. The managers are still in the throes of Iraq shock. As late as 1989, Bonn had pushed German industry, from the smallest shop to the biggest concern, to become involved with the dictator Saddam Hussein. After the attack on Kuwait, the politicians were incensed about the many arms shipments to Baghdad.

Many exporters fear that with their shipments to Iran they could one day find their way into the headlines again. Many goods that are shipped to the Near East are so-called dual use goods—products that have a civilian as well as a military use.

Once more, the [German] Federal Government is pushing, this time toward Teheran. And once again, the transactions of today give a foretaste of the scandal of tomorrow. The best example of this is the pesticide plant in Ghaswin, which is much sought after by Iran.

For years now, many intelligence-gathering services have been harboring the suspicion that Teheran wants to order such a plant to refurbish it for the production of nerve agents to be used in warfare.

It is possible to trace the Iranians' plans back to the late 1980's. The Frankfurt-based plant-construction concern, Lurgi had the order for Ghaswin all but sewn up. Under pressure from the [German] Federal Government, the project was discontinued, and Lurgi withdrew its offer.

Nothing has changed insofar as the components for Ghaswin are concerned. Now, as then, what is at issue is the construction of a facility for the production of the

organophosphoric pesticide dimethoate. This substance is among the few toxic insecticides.

Chemicals are needed for the synthesis of this agent that could serve as preliminary products for nerve gases. According to intelligence, the substance at issue is the modern chemical warfare agent VX, which is far more dangerous than the usual mustard gas or tabun. VX has a property that makes it particularly interesting for countries like Iran. The toxin is not particularly volatile, which makes it quite suitable for use in a hot climate like that of the Near East.

The Bundesnachrichtendienst [BND] [German intelligence] provided those in power in Bonn with good information concerning Ghaswin. After the attempt with Lurgi had gone awry, according to the BND, Iran tried to find suppliers in Yugoslavia, Czechoslovakia, South Korea, and India.

The BND at that time issued forceful warnings against making chemical sales of this type to these countries. The BND said it was conspicuous "that the Iranian Defense Ministry is very keenly interested in the establishment of these facilities." It said that Teheran was taking pains "to have a weapons production facility of its own."

A noticeable number of trails lead into the Federal Republic [of Germany]. Through a diplomatic office in Duesseldorf, Teheran ordered 3,400 tons of a preliminary product needed to make materiel.

All of that must have sharpened the politicians' senses in Bonn, but the minister of the economy, Juergen Moelleman, who is responsible for such matters, sees his role, quite naturally, as all his predecessors have seen theirs, as that of a minister who promotes export.

During his most recent visit to Teheran, the Free Democrat showed understanding for "Iran's wish" for a "chemical factory for fertilizers and pesticides."

So, that is the shape of German politics in the summer of 1991, just a few months after the end of the Gulf War.

Once again, tricks and appeasement are the order of the day, and there are parallels to the German poison gas scandals in Rabita, Libya and Samarra, Iraq.

The intelligence services warned the [German] Federal Government repeatedly over a period of many years against building witches' kitchens where toxic gases would be brewed, but the advice fell on deaf ears in Bonn.

"I am not the minister of the BND," says Mr. Moelleman, the Free Democrat. Before leaving for Teheran at the end of June, he said that he had learned from Minister Lutz Stavenhagen, of the Office of the Chancellor, that Iran, according to intelligence gathered by several intelligence-gathering services, purportedly had plans to make toxic gas.

Mr. Moellemann said, following his visit to Iran, that the matter would have to be looked into "by real experts." At the present time, the minister points to Iran's readiness to accept fully the inspection possibilities that were discussed at the Geneva disarmament talks on chemical weapons. Incidentally, a preliminary decision on the authorization is far from having been reached at this time.

The question is whether such monitoring guarantees have any substance. The construction of such a plant takes at least six years—and no one now knows what the situation in Iran will look like at that time.

Even among some managers in the chemistry industry, Moellemann's offer was greeted with a lack of understanding. "First, warnings are issued," says a chemical salesman in Frankfurt, "then we are encouraged to follow through, and if it all goes sour, we're left holding the bag."

Mr. Moellemann's economic diplomacy is not easily understood. He absolutely refuses to permit the export of the remaining parts for the atomic reactor provided by Siemens in Bushehr, the construction of which had been suspended after Khomeini came to power.

In that case, at least, Moellemann has good reasons. Experts throughout the world are fearful that Iran is primarily interested in nuclear technology so that it will be able to build the bomb.

Weapons of mass destruction can also be produced with a pesticide plant; and it should be no easier to monitor such a facility than it is to monitor a power plant.

Arms Export Controls Seen Ineffective

91WC0117A Duesseldorf WIRTSCHAFTSWOCHE
in German 31 May 91 pp 42-54

[Article by Gregor Andreas Geiger, Dieter Claassen, et al: "Sharper Teeth: Arms Exports to Near East Booming; Powerful National Interests Thwart International Control"]

[Text] Hardly had the Gulf War come to an end when word of a "new world order" made the rounds. U.S. President George Bush held forth on disarmament proposals for the Near East, announced the destruction of the U.S. arsenal of chemical weapons, and sent his secretary of state on a thus-far not very successful peace tour through the crisis region.

Undecided developing countries, on this the Western nations are agreed, are not to be given the opportunity in the future to develop and build atomic bombs, chemical, or biological weapons, and the associated missile carriers. For that reason, Bush also proposed a sales embargo on ballistic missiles having a range of more than 150 km.

In establishing export controls, the Germans, who had been pilloried for illegally delivering poison gas technology to Libya and Iraq, now played the role of the star pupil: In the opinion of the Federal Association for German Export Trade [Bundesverband des Deutschen Exporthandels], they tightened their export controls to a point where "they can no longer be implemented by a normal middle class enterprise" (see box entitled "Germany: Managers Must Change Their Way of Thinking" at end of article).

World public opinion is only slowly coming to the realization that the peacemaking activities of the politicians in essence amount to actionism. The acute danger to world peace does not stem from atomic, biological, or chemical weapons, but rather—as in the Gulf War, as well—from conventional weapons. And with these, a brisk business is being done by both Western and Eastern manufacturers—also in the post-Gulf War period. Even Saddam Hussein is a partner in these dealings, his alleged isolation notwithstanding. The slogan "Tanks Yes, Chemical Weapons No" is thus not devoid of a "certain amount of hypocrisy," in the opinion of Herbert Wulf of the Stockholm Institute for Peace Research Sipri.

On the other hand, the arms dealers are having their problems at the moment: The Viennese disarmament agreements and the insolvency of a number of Third World countries caused the armament manufacturers' traditional markets in Europe and Asia to wither. But that can be countered—thanks to the Gulf War—with some very relevant marketing ideas. Where the demand drops, one enlivens it by extolling the products as "battle proven." This is what the British armament firm GEC Ferranti did in March at an armament-products trade fair in Singapore with its target acquisition equipment that was utilized in the Gulf War. The sister firm Marconi could not take a back seat there, and for its part claimed the sinking of 13 ships by its missiles. Video presentations of air attacks by the U.S. Air Force on Iraqi positions—still fresh in the memory of TV viewers around the world—are also suitable for armament public relations purposes.

Advertising falls on fruitful soil above all in those areas where the most weapons were sold in the past—in the Near East. There the wealthy nations are stocking up on weapons that demonstrated an effectiveness in the Gulf War. Saudi Arabia's King Fahd, in mortal fear of his neighbors Iraq and Iran, wants to equip all three military services of his country with the absolute best and double the number of recruits. "We need sharper teeth," is the opinion also of the Kuwaiti secretary general of the Gulf Cooperation Council, Abdulla Bishara. Egypt, Israel, Syria, and Turkey likewise want to enlarge their arsenals.

But—that too is a result of the Gulf War—the mid-term dangers of such dealings are no longer taboo. United Nations Secretary General Javier Perez de Cuellar hit the nail of the dilemma on the head before the European Parliament. There is talk again about arms deals with

friendly states, he said, "which have more than enough time to change into feared enemies before the gear and the equipment sold to them become obsolete." NATO Secretary General Manfred Woerner likewise wants to reduce the risk of one day looking down the barrels of our own guns: Arms deals should not, "with the help of a reckless export policy, make up for diminishing prospects in the domestic markets."

The countermeasures discussed have not been fully thought through, however. And so the European Parliament, for example, wants the armament trade to be subordinated to the law of the community, to work out a joint weapons exporting policy, and to open a register for weapons sales at the United Nations. The EC foreign ministers, as well, instructed the EC commission at the end of April to work toward a weapons export register as part of the political union.

Within NATO, a working group is brooding over the proposal of U.S. envoy William H. Taft that the export barriers for armament goods between NATO member states be dismantled, so as to improve cooperation within the alliance in arms development and procurement. More or less as a waste-product, thus Taft's idea, the NATO partners would be forced to agree to rules covering resales, so as to preclude the passing on of weapons to potential villains via an alliance partner—which, as the delivery by Spain to Iraq of MBB helicopters built under license shows, is a very real problem.

Already while introducing the plan, the American had the feeling that it would be "a difficult project." And things did in fact go wrong at the dress rehearsal, when the chiefs of the arms procurement offices of the 16 NATO member states could not agree on a common procurement agency. The background to this: A number of NATO states even view a freer arms trade within their own alliance as a threat to their national armament industry.

Already now the German industry considers itself to be a victim of the antiarmament trend: The military weapons control and foreign trade law—the further tightening of which needs only to be approved by the upper house of parliament—create export barriers that can be surmounted only with great difficulty. And in the event Germany were to go it alone with a more rigorous permit-granting policy, the firms fear that they will fall ever farther behind, also with respect to arms projects that have been approved.

National differences [exist]; thus Daimler-Benz boss Edzard Reuter in a letter to Chancellor Helmut Kohl and to EC Commission President Jacques Delors, "stand in opposition to a jointly resolved European security policy and cannot be tolerated by the industries affected." Firms that have to export under restrictive conditions would lose their "capability for cooperation." The Federation of German Industries [Bundesverband der Deutschen Industrie] likewise warns point-blank of "competitive disadvantages." If one cannot deliver the goods

oneself, then the competitors should likewise not be able to deliver, thus the—logically understandable—slogan.

It is clear to German politicians, as well, that solo ventures are "pure anachronisms," thus [stated] CDU [Christian Democratic Union] Bundestag member Rudolf Sprung. The prerequisite for an international control, according to Lorenz Schomerus, foreign trade expert in the Economics Ministry in Bonn, is a rethinking process by those countries which in the past have viewed their arms export policy as part of their foreign and security policy.

But only faint beginnings of a rethinking process are discernible there. To be sure, Professor Roland Schmitt, president of Rensselaer Polytechnic Institute in Troy, New York, working with a group of experts, in January prepared a study commissioned by the U.S. Congress on sensitive exports, in which multinational controls for the export of nuclear weapons, biological and chemical agents, as well as missiles, were proposed as the best solution. "But," Schmitt warns, "the key actors must be in the boat each time. A missile control agreement without the Soviets, the Chinese, and perhaps even the Brazilians makes no sense." A lofty goal. For now, however, there is no talk in Washington of a more easily attainable restriction with regard to battle tanks and guns.

Lip service to an international arms export-control agreement is also being given in France. President Francois Mitterand was the first to promise new controls—and he did so while the crusade against the Iraqi aggressor was still going on. And then the politicians tried to outdo one another in a display of good will. Laurent Fabius, the conservative president of the National Assembly, called upon the governing Socialists "to make armament limitations and the control of weapons exports a main theme of our thinking and our actions." Then-Prime Minister Michel Rocard demanded "limited, selective and controlled" arms exports. And Francois Fillon, defense expert of the post-Gaullist collective movement RPR [Rally for the Republic], wanted weapons deliveries worth more than 20 million francs to be subject to approval by a permanent parliamentary committee.

But it can hardly be seriously expected that France will push for stricter international controls. To date, weapons exports have been controlled by the responsible interministerial committee CIEEMG [Interministerial Advisory Committee on Arms Exports]. Armament plants wishing to acquire orders must first get a permit there. A second permit is required before sales negotiations begin and a third before final conclusion of the contract. It is the most effective control system of all Western industrial nations—on paper.

The political will to promote arms exports, come what may, made France the third-largest weapons supplier in the world (see table).

Weapons Exports: Leading World Powers

Exporting Country, 1986-90 (in billions of dollars)	Breakdown (by percent)		Share of Near East Business, 1986-90 (in percent)
	To Indus- trial Nations	To Third- World Countries	
USSR 60.80	29.0	71.0	29.1
United States 53.81	59.6	40.4	26.6
France 13.78	23.9	76.1	15.9
Great Britain 7.75	19.9	80.1	8.5
China 7.68	1.5	98.5	9.9
West Germany 4.75	59.0	41.0	1.1
Czechoslovakia 2.40	69.5	30.5	0.9

Source: Sipri

In Great Britain, as well, a tightening of export controls is not on the agenda. The Defense Ministry in London cites the fact that it is "already a partner to agreements on nuclear, chemical, and biological mass-destruction weapons." With respect to conventional weapons, decisions are made on a "case by case" basis.

Voluntary self-restraint is currently inappropriate. The transformation of the shrinking branch of industry to peacetime production—referred to as conversion—is causing problems. Sir Peter Levene, until recently chief buyer for the defense ministry in London, asks dryly whether firms which until now have delivered cartridge cases can suddenly produce "lipsticks," since "there are already a number of established firms that are manufacturing these products."

Neither the Americans nor the French or the British, therefore, are offering themselves as partners of the Germans in tightening controls—but at first glance, at least, it would appear that the Italians are. As recently as the beginning of the 1980's, Italian arms suppliers were in fourth place on the lethal-merchandise export hit-list. And now their share of the world market has dropped to barely 1 percent. Already last year, the government tightened the control regulations. Massimo Macchia, deputy director of the approval agency in the Italian Foreign Ministry, feels "a close affinity to the German position."

The Italians can attribute a goodly portion of this moral progress to the inertia of their approval agencies. For hand-in-hand with the new law came a change in the responsible agency in the government. While in the past the companies were given their export licenses by the Ministry of Foreign Trade, their applications now go to the minister of foreign affairs. But there they have been piling up for months and waiting to be processed.

But even if the Rome-Berlin axis were to become the beginning of a restrictive arms export policy of the entire Western world—the policy cannot succeed without the

Soviet Union. Until 1989 it was the world's largest arms exporter (see table). The drop in exports in 1990 to approximately half of the previous year's total volume should not be misread as a new look. Aside from strategic considerations, the drive to get hard currency enjoys absolute precedence in Moscow. And it is for that very reason that the often-implored armament conversion in reality makes hardly any headway, even under Nobel Peace Prize recipient Mikhail Gorbachev. The highly specialized Soviet firms can, to be sure, manufacture other products, but these can in most cases be sold only in domestic markets and not abroad.

And in those cases where it would be possible to convert to products that would be competitive in world markets, this is overlooked by the planned economy experts. Thus, for example, the director of the armament plant NPO Mashinostroyeniya in Moscow, Gerbert Yefremov, is angered by the order received from Moscow to produce machines for poultry slaughterhouses in the future. He would rather use his expertise to supply Western partners with data from outer space. In Yefremov's opinion, the Soviet spy satellite Almaz is wonderfully suited for "global environmental protection" purposes.

Also Czechoslovakia, the biggest producer of weapons among Moscow's former satellites, does not wish to forego armament-related jobs during the time of radical economic change. The delivery by Prague of approximately 100 T-72 main battle tanks to Syria is being discussed—under protest by Israel. Also munitions, fire control facilities, armored personnel carriers, and until recently also the explosive Semtex that was so popular with assassins, are supplied by the neomarket economists—mainly to Libya, India, and Iran.

Even less willingness for international export restrictions is shown by Asiatic and South American countries. During the war between Iran and Iraq, China profited, among other things, from the sale of its Silkworm surface-to-surface missile. North Korea, as well, is getting into the act in the arms trade. And Brazil too is always right there when it comes to infiltrating armament-export niches—with self-produced battle tanks and jet aircraft, for example.

The goal of cutting financially solvent potentates off from weapons supplies in the future will therefore most likely be extremely difficult to achieve. An international consensus on controls and restrictions would be attainable only in a better world. Too many dealers and politicians are just waiting to fill the gap left by a supplier who withdraws from an arms-export deal.

Even in Germany, whose Economics Minister Juergen W. Moellmann is pushing for a restrictive arms export policy in the United States, the temptation is still too big. After President Richard von Weizsaecker had disapproved in February of the display of a Tornado model at

the Daimler-Benz stand at the TechnoGerma Fair in Seoul, the managing director of Deutsche Aerospace, Karl J. Dersch, gave the quickly concealed model to the supreme commander of the South Korean Air Force as a gift. This act of generosity was not without selfish motives—being discussed is the sale of 50 fighter-bombers to South Korea.

[Box, p 49]

Europeans: Perceptible Cuts

In Paris, just as in London, the debate over possible export controls for armament products again and again runs into an almost insurmountable obstacle: The high level of dependence on weapons exports. To take France as an example: Approximately a third of the production is exported. Ranging from the General Directorate for Armament subordinate to the Defense Ministry in Paris to such firms as Matra or Dassault Aviation, this branch of industry has 261,000 employees and had sales last year amounting to the equivalent of 40 billion German marks [DM].

Since the Gulf War, this high level of dependence on exports has turned into a problem: Half of the French exports go to countries of the Maghreb and the Near East. But to date the brisk trade was definitely welcomed by the responsible persons in industry, the government, political parties, and labor unions. For exports make production in large numbers possible. And only through mass manufacturing can the French Armed Forces, 96 percent of whose equipment is provided by the national armament industry, be supplied with new and modern weapons and equipment at reasonable prices.

As an example of this, the business magazine L'EXPANSION cites weapons such as the Exocet missile, 83 percent of which are exported, the Hot antitank missile (81 percent), the Puma helicopter (73 percent), as well as the Mirage F1 bomber (65 percent). "What is good for Dassault is also good for France," thus the characterization of the situation given by the news magazine LE POINT.

If the French armament industry, as a result of tighter control agreements reached within the European Community or the West European Union, should really have to forego orders from abroad, this would mean perceptible cutbacks. Experts believe that not only the 54,000 employees whose jobs are directly dependent on exports would sooner or later have to be dismissed, but that far more jobs could be affected.

The situation in Great Britain is similar to that in France. As a result of the drastic cuts in defense expenditures, the armament industry on the island is threatened by thousands of dismissals. Brisk exports would at least cushion the cutbacks during times of rapidly increasing unemployment. In recent months, British Aerospace, the country's largest armament concern, the

submarine shipyard VSEL, the aircraft-engine manufacturer Rolls-Royce, and a number of other firms have announced the elimination of more than 25,000 jobs.

Things could get worse. A cost-aware procurement policy and the recent austerity measures of the government are creating a very difficult situation for England's weapons builders. For the first time since World War II the defense budget is less than 4 percent of the British gross national product. By 1993/94, expenditures are to be reduced by an additional 6 percent in real terms.

Foreign trade, as well, is currently diminishing by approximately 2.5 percent in real terms per year. As recently as 1990, orders from abroad totalled an estimated \$5 to \$6 billion. About 55 percent of the armament exports have in the recent past been going to the Near East, and just under 15 percent to Asia, Australia, New Zealand, and the Pacific area.

It follows that for a number of British firms the Gulf War came at just the right time to reinvigorate the sluggish weapons business—above all in the Near East. Sydney Gillibrand, the head of the armament branch of British Aerospace, makes no secret of the fact: Even a huge weapons deal concluded with Saudi Arabia already in the second half of the 1980's will, in his opinion, "benefit considerably" from the Gulf War. The aircraft deal may have a value of as much as DM450 billion.

Also placing their bets on the Gulf seal of quality "battle-proven" are the firms Vickers with their Challenger tanks, Vosper Thornycroft with Hunt-class mine-seeker boats, and the Hunting Plc with JP 233 bombs, which paralyzed a large portion of the Iraqi airfields. Behind the British branch leaders, dozens of smaller weapons manufacturers are also rubbing their hands in glee. At a trade fair held in May in the sea resort of Brighton, the word was that they were very successful at filling their order books. [end box]

[Box, p 52]

USSR: Decrease in Weapons Exports

The Soviet armament industry fears that its reputation may be on the line. Saddam Hussein's Scud missiles—made in USSR—did in fact spread fear and horror during the Gulf War. But when viewed objectively and in retrospect they accomplished little. The Soviet Union fears for its position as the world's biggest weapons supplier. For that reason, Moscow TV, in April, brought a real live commanding general of the highly secret rocket forces out in front of the camera—with the argument that Iraq had fired only the oldest Scud models. "We have much better missiles today."

The easy-to-see-through assurances on state television were intended for an international audience. Along with Kalashnikov automatic rifles, MiG jet fighters, battle tanks, and missiles have belonged to the export hits of the Soviets. Experts estimate that in the last 10 years more than 40,000 Soviet missiles were sold worldwide.

But the crisis has been apparent for some time: Already before the Gulf War, the 5,000 Soviet armament plants had lost many export markets. The result is a rapid slump in sales. While in 1989 Moscow delivered weapons worth \$12.2 billion all over the world, this figure dropped to only \$6.4 billion in 1990.

Unlike German or American weapons manufacturers, the Soviets are today serving practically only the developing nations. According to the peace research institute Sipri in Stockholm, Moscow is responsible for about 40 percent of weapons deliveries to the Third World. India, Syria, and above all Iraq, have thus far been the principal clients.

With the breakup of the Warsaw Pact, the last markets in individual industrialized nations are also destined to crumble over the medium term. In the armament area, as well, Poland and Hungary want to free themselves of dependence on the Soviets as quickly as possible. Moscow is desperately looking for new customers able to pay with hard currency. This means more intense competition in the world market, for already in the past the Soviets were ready to dispose of their arsenals at dumping prices. Without additional foreign currency, the ambitious development projects of the Soviet armament industry can no longer be financed.

But already in the past, Third World clients have shown themselves to be exceedingly slow in paying. To this day, the Soviet Union has had to put on hold the payment of huge debts by Syria, Algeria, Afghanistan, as well as Libya and above all Iraq.

It is no wonder, therefore, that the Soviet Union is under pressure. And scruples in export policies are unknown to the Soviet military: To North Korea, Moscow apparently even sold a technology that can be used for atomic facilities—and not only for their peaceful utilization.

And this vis-a-vis a communist regime in Pyongyang that belongs to the most unpredictable countries in the world. [end box]

[Box, p 54]

Germany: Managers Must Change Their Way of Thinking

Ever tighter export regulations are causing perplexity among Germany's managers. "Will everybody responsible for exports have one foot in jail in the future?" a firm representative exclaimed at an information event in Duesseldorf. "What Bonn wants is a strong increase in the sense of responsibility in the conduct of business," representatives of the Federal Office for Economics [Bundesamt fuer Wirtschaft] respond.

In order that this sense of responsibility will also be palpable, every firm submitting applications for export permits must, since 1 March of this year, appoint a "person responsible for exports" at the top management level. In the future, a member of the board of directors or a managing director will be held liable for criminal

exports. The managers must sign a statement to the effect that "in the event of any reliability test that may be opened, they are prohibited from pleading ignorance or misinterpretation of the regulations governing export trade." What this means in plain language is that ignorance is no excuse. Thus, if something requiring prior approval crosses the border past the eyes of the Federal Office for Economics and customs, whoever is responsible for exports will personally be brought to court—confinement for up to 10 years is provided for by the export trade law. In addition, the firm is required to dismiss the responsible person from his position. And there will be little chance of the firm's getting any new export permits approved for quite a while.

That makes an impression. "A rethinking process is taking place in the firms," reports Gert W. Adomeit with respect to the consequences. The responsible expert of the German Council for Industry and Commerce [Deutscher Industrie- und Handelstag (DIHT)] has observed that many firms are now creating special staff positions for the control of exports—in accordance with the recommendation of the DIHT and the Federation of German Industries [Bundesverband der Deutschen Industrie (BDI)]. "The person formally responsible can do his job only if the information flow is controlled accordingly," Adomeit feels.

The firms are now checking internally what their exporters are selling and to whom, and also whether they declared it correctly. In the opinion of the Association of German Machine and Plant Construction [Verband Deutscher Maschinen- und Anlagenbau], this is an internal "industrial espionage" of sorts. Armament concerns such as Rheinmetall in Duesseldorf or Deutsche Aerospace AG (Dasa) in Munich see things more soberly. Because of the sensitive nature of their exports, both firms have for years already had a sort of "person responsible for exports" within the firm. "The information flow was always very good," reports Dasa spokesman Christian Poppe. "We were able to assure that the executive board learned of all projects that were ethically difficult to resolve." [end box]

SWEDEN

Proposal To Ban Nuclear Power Investments Criticized

91WP0116A Stockholm DAGENS NYHETER
in Swedish 4 Jul 91 p 8

[Text] The government's proposal to ban investments in nuclear power is criticized by the government's own experts. There is already a law today that prohibits all forms of new investments in nuclear power, for example, the construction or startup of new reactors.

But the government wants further to strengthen the law, so that it will also prohibit replacement of parts in an existing nuclear power plant in order to prolong its

lifetime. The sole exception is to be when the investments are of significance for [national] security.

But the experts who have studied the proposal, among them lawyers and technicians from the Radiation

Inspection Agency and the Nuclear Inspection Agency, give it a thumbs-down. It is not possible, in their opinion, to separate out replacement investments that are not of significance to security.

Weapons Check Law

WA0729110591 Hong Kong *THE HONG KONG STANDARD* in English 25 May 91 p 4

[Article by Vivian Tse]

[Text] "So far we have no information indicating any international syndicate is...using Hong Kong as a safe passage to deliver illegal nuclear and biochemical weapons."—Trade Department officer Tony Cheung

Nuclear weapons and other biochemical munitions will be subject to inspection once they enter Hong Kong boundaries.

The new arrangement, expected to take effect in two months, will keep Hong Kong in line with international efforts to check the proliferation of military weapons.

The arrangement will also enable Hong Kong to seize any illegal nuclear, chemical, biological and other weapons.

Under the arrangement such military weapons will have to be licenced before they enter Hong Kong on transit.

It will also empower officers of the Customs and Excise Department to board vehicles, aircraft and vessels carrying such weapons on transit through Hong Kong.

At present, there is no control over such strategic commodities if they are only in transit and not unloaded. Tony Cheung, a principal trade officer with the Trade Department, said the proposal, when passed by the Legislative Council, was a preventive measure.

"So far, we have no information indicating any international syndicate is taking advantage of Hong Kong's present situation and using Hong Kong as a safe passage to deliver illegal nuclear and biochemical weapons," he said.

"Under the new arrangement, Hong Kong can help curb the illegal transport of military items, which have escaped from an export country's inspection, even when they are in transit in the territory."

Mr. Cheung said the changes should be acceptable to trade and shipping interests because the range of items to be brought under control was very narrow.

At present, only military items exported from or imported to Hong Kong are under licencing control.

The new arrangement is being proposed by the Government as an amendment to the Import and Export Ordinance following Executive Council approval.

This is a U.S. Government publication. Its contents in no way represent the policies, views, or attitudes of the U.S. Government. Users of this publication may cite FBIS or JPRS provided they do so in a manner clearly identifying them as the secondary source.

Foreign Broadcast Information Service (FBIS) and Joint Publications Research Service (JPRS) publications contain political, military, economic, environmental, and sociological news, commentary, and other information, as well as scientific and technical data and reports. All information has been obtained from foreign radio and television broadcasts, news agency transmissions, newspapers, books, and periodicals. Items generally are processed from the first or best available sources. It should not be inferred that they have been disseminated only in the medium, in the language, or to the area indicated. Items from foreign language sources are translated; those from English-language sources are transcribed. Except for excluding certain diacritics, FBIS renders personal and place-names in accordance with the romanization systems approved for U.S. Government publications by the U.S. Board of Geographic Names.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by FBIS/JPRS. Processing indicators such as [Text] or [Excerpts] in the first line of each item indicate how the information was processed from the original. Unfamiliar names rendered phonetically are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear from the original source but have been supplied as appropriate to the context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by the source. Passages in boldface or italics are as published.

SUBSCRIPTION/PROCUREMENT INFORMATION

The FBIS DAILY REPORT contains current news and information and is published Monday through Friday in eight volumes: China, East Europe, Soviet Union, East Asia, Near East & South Asia, Sub-Saharan Africa, Latin America, and West Europe. Supplements to the DAILY REPORTs may also be available periodically and will be distributed to regular DAILY REPORT subscribers. JPRS publications, which include approximately 50 regional, worldwide, and topical reports, generally contain less time-sensitive information and are published periodically.

Current DAILY REPORTs and JPRS publications are listed in *Government Reports Announcements* issued semimonthly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161 and the *Monthly Catalog of U.S. Government Publications* issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The public may subscribe to either hardcover or microfiche versions of the DAILY REPORTs and JPRS publications through NTIS at the above address or by calling (703) 487-4630. Subscription rates will be

provided by NTIS upon request. Subscriptions are available outside the United States from NTIS or appointed foreign dealers. New subscribers should expect a 30-day delay in receipt of the first issue.

U.S. Government offices may obtain subscriptions to the DAILY REPORTs or JPRS publications (hardcover or microfiche) at no charge through their sponsoring organizations. For additional information or assistance, call FBIS, (202) 338-6735, or write to P.O. Box 2604, Washington, D.C. 20013. Department of Defense consumers are required to submit requests through appropriate command validation channels to DIA, RTS-2C, Washington, D.C. 20301. (Telephone: (202) 373-3771, Autovon: 243-3771.)

Back issues or single copies of the DAILY REPORTs and JPRS publications are not available. Both the DAILY REPORTs and the JPRS publications are on file for public reference at the Library of Congress and at many Federal Depository Libraries. Reference copies may also be seen at many public and university libraries throughout the United States.

END OF

FICHE

DATE FILMED

4 NOV 91